

# ***Compact Hi-Fi Stereo System***

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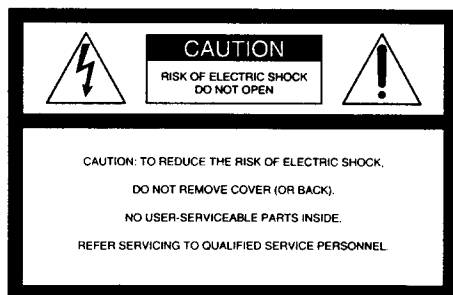
Operating instructions



***LBT-D670AV***

## WARNING

**To prevent fire or shock hazard, do not expose the unit to rain or moisture.**



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

### INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### CAUTION

You are cautioned that any changes or modification not expressly approved in this manual could void your authority to operate this equipment.

### Note to CATV installer:

This reminder is provided to call CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

### Owner's Record

The model and serial numbers are located at the rear of the unit. Record the serial number in the space provided below. Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. LBT-D670AV Serial No. \_\_\_\_\_

## For customers in Canada

### CAUTION


TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

## Welcome !

Thank you for purchasing the Sony Hi-Fi Component System. This series is packed with fun features. Here are just a few:

- DBFB (Dynamic Bass Feedback) system that boosts low frequency range audio to provide deep, powerful bass sound
- Dolby Pro Logic Surround System\* that lets you enjoy theaterlike sound effects in your listening room
- A preset feature, that lets you store and recall up to 30 of your favorite radio stations
- A graphic equalizer that lets you adjust the audio quality to match 10 music types
- A loop play function that lets you play a short portion of a track repeatedly like a sampler on the CD player
- A timer that lets you set the CD player, tape player, or radio to turn on and off whenever you want
- A dual tape deck that lets you record from the radio, CD player, or from the other tape deck and relay play from both decks
- A CD player that lets you play up to 5 CDs in a row
- A music clip feature, that lets you create groups of favorite tracks from your CDs
- A remote that lets you control the music from your seat

\* Manufactured under license from Dolby Laboratories Licensing Corporation.

Additionally licensed under Canadian patent number 1,037,877. "Dolby," the double-D symbol  and "Pro Logic" are trademarks of Dolby Laboratories Licensing Corporation.

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# Chapter 1: Setting Up

## Connecting the Stereo

### Setting up the Speakers for Dolby Pro Logic Surround

### Inserting the Batteries

### Setting the Clock

## Connecting the Stereo

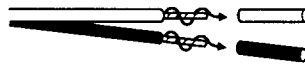
Use the illustrations below to connect your stereo.

If you want to connect any optional components to the stereo, see "Connecting Optional Video Equipment" in Chapter 6 and "Connecting Optional Equipment" in Chapter 7.

### STEP 1 Connecting the Speakers

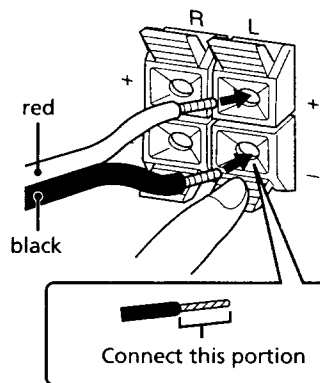
#### Before connecting the speakers

Twist the speaker cable coating and pull it from the end of the cable.



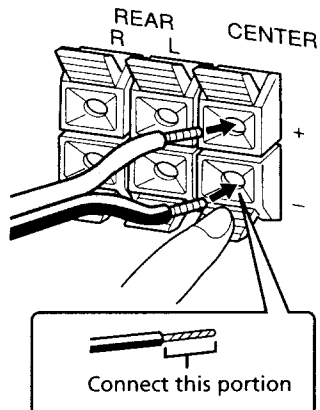
#### Connecting the front speakers

Connect the right front speaker to the FRONT SPEAKER R connectors and the left front speaker to the FRONT SPEAKER L connectors with the red cord to + and the black cord to -.



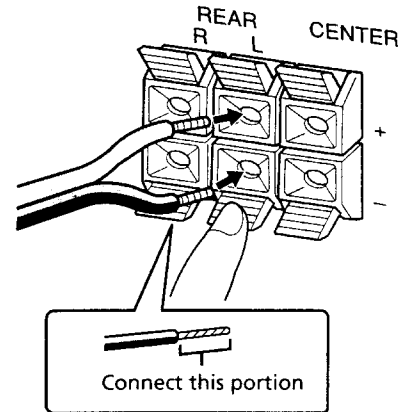
#### Connecting the center speaker

Connect the center speaker to the SURROUND SPEAKER CENTER connectors with the gray cord to + and the gray with black stripes cord to -.

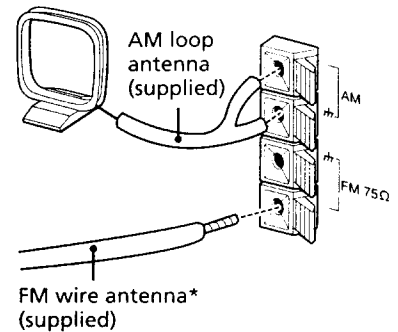


#### Connecting the rear speakers

Connect the right rear speaker to the SURROUND SPEAKER REAR R connectors and the left rear speaker to the SURROUND SPEAKER REAR L connectors with the gray cord to + and the gray with black stripes cord to -.

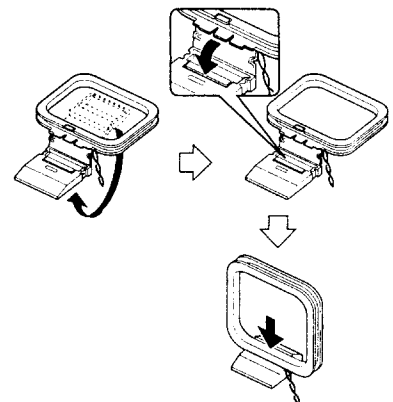


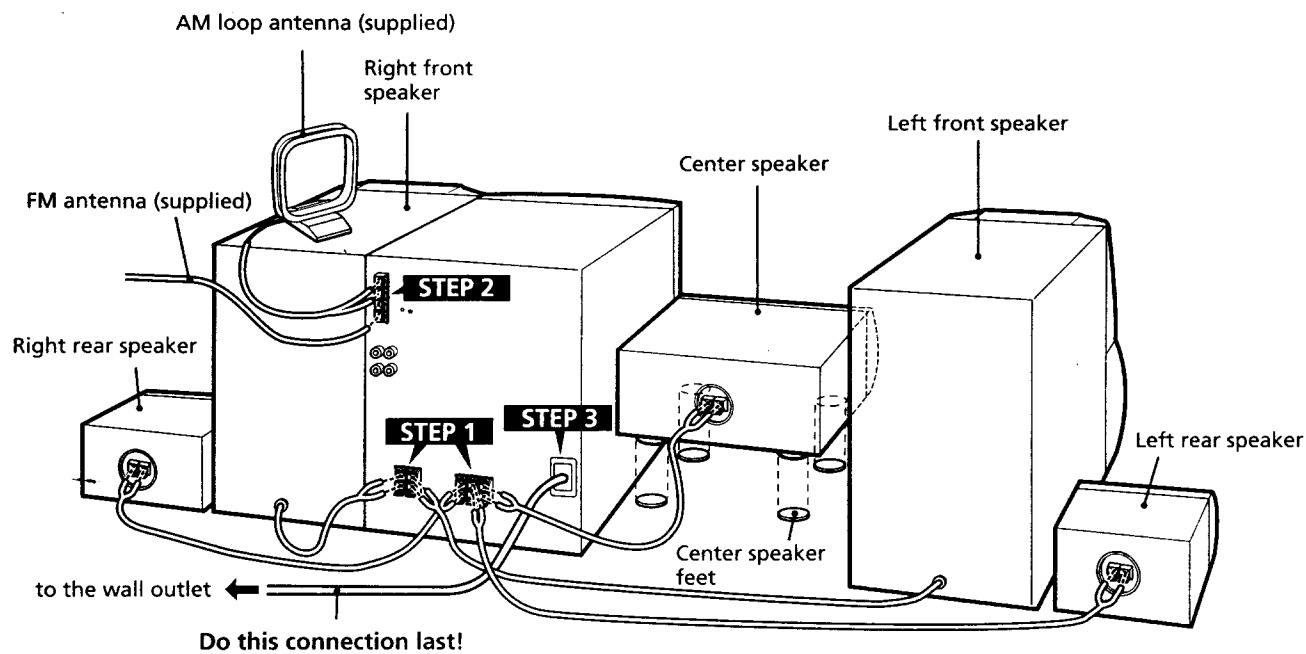
### STEP 2 Connecting the Antenna



\*Note: Extend it horizontally

#### To set up the AM loop antenna



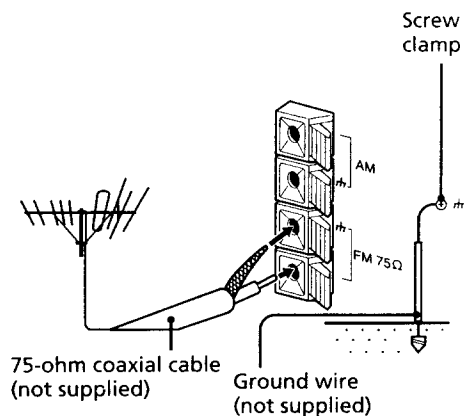


#### To improve the FM reception

Connect an outdoor FM antenna to the FM 75Ω terminal, using a 75-ohm coaxial cable.

#### Important

Protect the unit from lightning damage by grounding a wire from the  $\hbar$  terminal screw clamp. To prevent a gas explosion, do not connect the ground wire to a gas pipe.

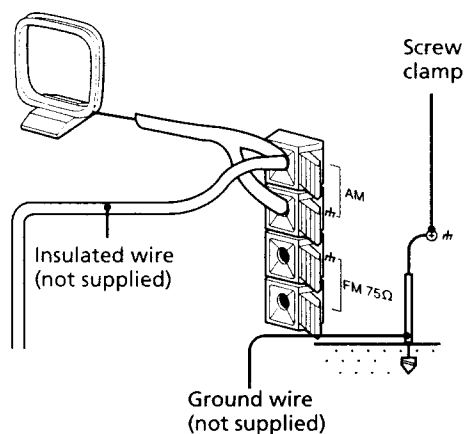


#### To improve the AM reception

After you connect the AM antenna, connect a 6- to 15- meter (20- to 50- feet) insulated wire to the AM terminal. Connect the  $\hbar$  terminal to ground.

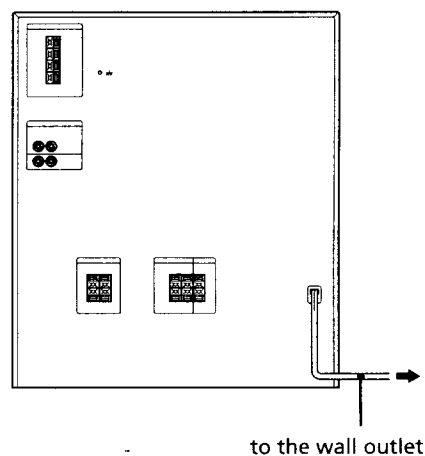
#### Important

Protect the unit from lightning damage by grounding a wire from the  $\hbar$  terminal screw clamp. To prevent a gas explosion, do not connect the ground wire to a gas pipe.



### STEP 3 Connecting the Power

Connect the AC power cord to the wall outlet after you have made all of the above connections.



#### Demo mode

The demo mode appears in the display when you connect the AC power cord to the wall outlet. To deactivate the demo mode, press DISPLAY/DEMO when the system power is off.

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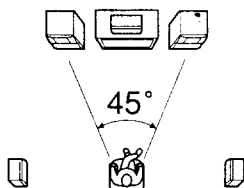
#### Note

When you turn on the system power for the first time, the disc tray starts rotating. You can operate the CD player after the disc tray stops rotating and "CD NO DISC" appears in the display.

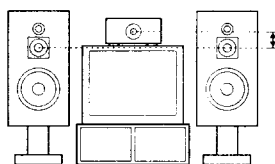
## Setting Up the Speakers for Dolby Pro Logic Surround

Proper speaker positioning is essential in order to achieve directional effects and diffused ambience, especially in the case of the surround speakers. Too much direct sound from the surround speakers can make its presence too obvious while too much diffusion may result in a directionless sound image. If it is not possible to locate the surround speakers in the preferred way, experiment with their positioning while keeping in mind the goal is to achieve a diffused and enveloping, but not overly vague, sound field.

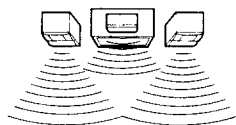
- 1 Position the left and right speakers so that they form a 45° angle with your listening and viewing position. The surround speakers should be mounted on the side walls as shown in step 4.



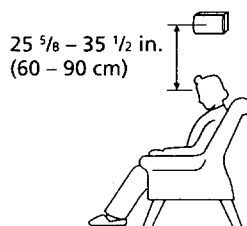
- 2 The two front speakers and center speaker should be positioned as close to the same height as possible.



- 3 The center speaker should be positioned even with, or slightly behind the front left and right speakers.



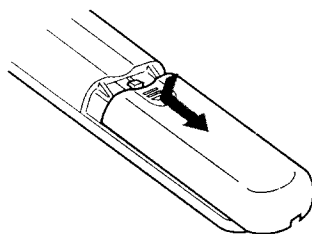
- 4 If possible, mount the surround speakers on the walls to the sides of your listening and viewing area, 25 5/8 to 35 1/2 inches above your seated position, facing each other.



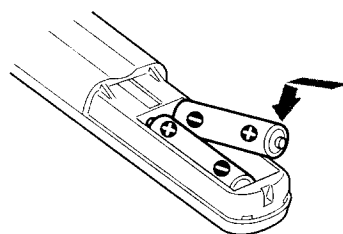
## Inserting the Batteries

Insert two size AA (R6) batteries in the supplied remote.

- 1 Open the lid.



- 2 Insert two size AA (R6) batteries. Match the + and - to the diagram in the battery compartment.



- 3 Close the lid.

#### Battery life

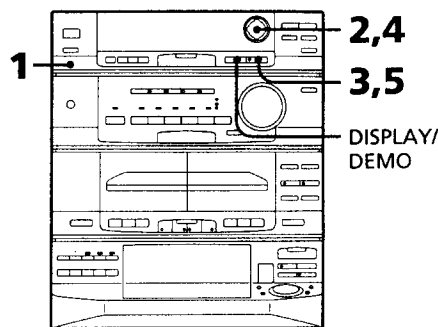
You can expect the batteries to last for about six months (using Sony SUM-3 (NS) batteries). When the batteries no longer operate the remote, replace both batteries with new ones.

#### To avoid battery leakage

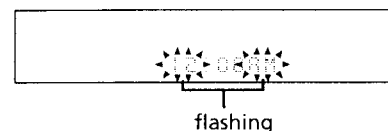
If you are not going to use the remote for a long time, remove the batteries to avoid damage caused by battery leakage.

## Setting the Clock

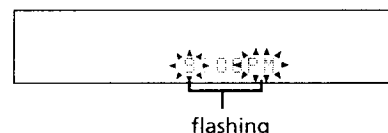
The built-in clock shows the time in the display.



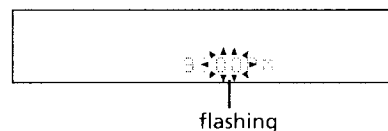
- 1 Press CLOCK SET. The "AM" and hour indication begin flashing.



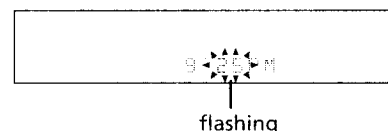
- 2 Set the current hour by pressing ◀ or ▶ (CURSOR CONTROL) until the correct hour appears.



- 3 Press ENTER/NEXT. The minutes indication begins flashing.



- 4 Set the current minute by pressing ◀ or ▶ until the correct minute appears.



- 5 Press ENTER/NEXT. The clock starts running and the upper dot flashes. Use the time signal to set the clock accurately. The upper dot flashes for the first half of a minute (0 to 29 seconds), and the lower dot flashes for the last half of a minute (30 to 59 seconds).



#### To check the time while power is on

Press DISPLAY/DEMO a few times. The current time appears for a few seconds.

#### To correct the clock setting

Repeat steps 1 to 5.

# Chapter 2: the CD Player

## Playing CDs (normal play)

### Playing Tracks in Random Order (shuffle play)

### Playing Tracks in the Desired Order (program play)

### Playing Tracks Repeatedly (repeat play)

### Playing Tracks by Repeating a Specified Portion (loop play)

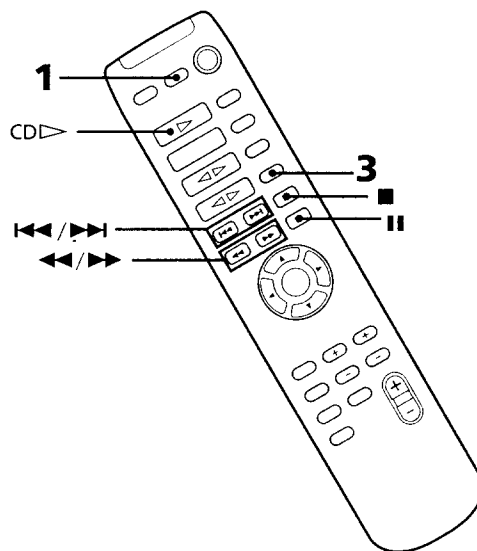
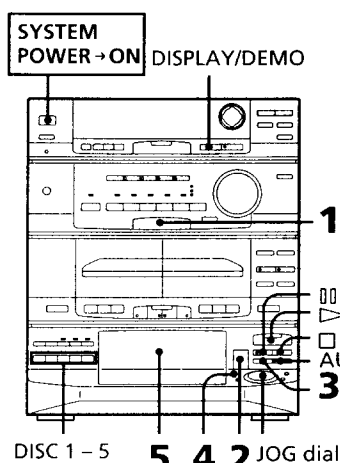
### Grouping Tracks (music clip)

## Playing CDs (normal play)

After you load up to five CDs, you can play all tracks or discs in the original order consecutively (normal play).

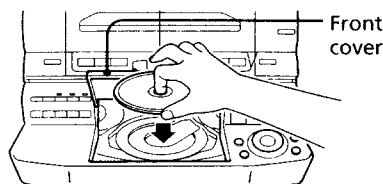
You can also play them in four modes: normal, shuffle, program, or repeat.

Before you play a CD, decrease the volume level by turning the VOLUME control counterclockwise, to prevent damage to the speakers.



**1** Press FUNCTION repeatedly until "CD" appears in the display.

**2** Press  $\square$  OPEN and load a CD (label side facing up) on the disc tray in the loading position.

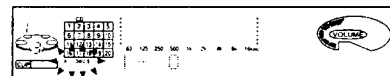


**3** Press DISC SKIP (or D.SKIP on the remote) to load up to four more CDs on the disc tray.

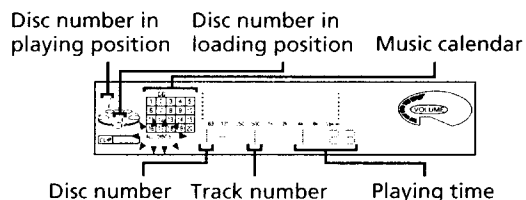
The disc tray rotates so that you can load other CDs.

**4** Press CONTINUE on the CD player to choose "1 DISC" or "ALL DISCS."

Choose	To play
1 DISC	Only the CD you have selected.
ALL DISCS	All CDs consecutively in order. Empty disc trays are skipped.



**5** Close the front cover. Play starts automatically from the CD in the loading position. The disc number (of which color is orange) appears in the disc calendar.



### When AUTO indicator is not lit

Press  $\triangleright$  on the CD player (or CD  $\triangleright$  on the remote) to play a CD.

To	Press
Stop play	$\square$ (■*1)
Pause	$\square\square$ (■*1)
Resume play	$\triangleright$ or $\square\square$ (CD $\triangleright$ *1 or ■*1)
Go forward to another track	During play or pause, turn the JOG dial clockwise*2. Or press AMS*3 $\triangleright$ on the remote.
Go back to a previous track	During play or pause, turn the JOG dial counterclockwise*2. Or press AMS*3 $\triangleleft$ on the remote.
Select a particular CD	The corresponding DISC 1 - 5 *4. Or DISC SKIP (D.SKIP*1) repeatedly.
Remove or exchange a CD	$\square$ OPEN*5

\*1 Remote

\*2 Turning the JOG dial quickly skips to the next CD.

\*3 Auto Music Sensor

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- \*4 If there is no disc at that number, the disc tray rotates and plays the next CD. If there is no disc at that number with the front cover opened, the disc tray rotates to the loading position.
- \*5 The disc tray rotates and brings the CD in the playing position to the loading position automatically when AUTO is selected (the AUTO indicator is lit).

### To remove or exchange the CD in the loading position while playing

Press  $\triangle$  OPEN and remove or exchange the CD in the loading position.

#### Note

When you exchange the CD while playing, the exchanged CD is the next CD to be played and its disc number flashes.

### To play tracks consecutively (non-stop play)

Press and hold down  $\triangleright$  on the CD player for a second.

### To cancel non stop play

Press  $\square$  on the CD player.

#### Note

You cannot use this feature when the CD play mode is SHUFFLE or PROGRAM. Press CONTINUE so that "SHUFFLE" or "PROGRAM" disappears from the display.

### To locate a particular point in a track

You can locate a particular point in a track while playing or pausing a CD. Use the buttons on the remote to operate this function.

#### To locate a point

While monitoring the sound

#### Press

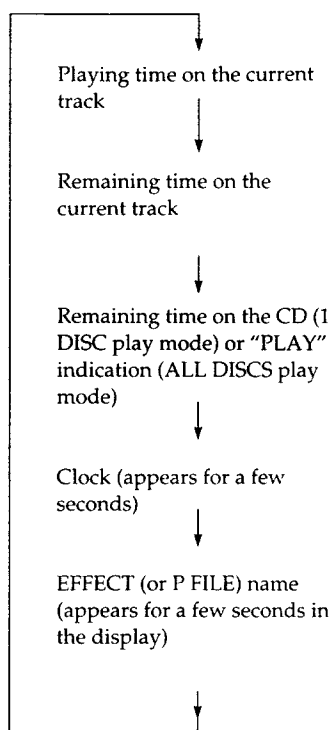
$\triangleright$  (forward) or  $\triangleleft$  (backward) on the remote and hold down until you find the point.

Quickly by observing the display during pause

$\triangleright$  (forward) or  $\triangleleft$  (backward) on the remote and hold down until you find the point. You will not hear the sound during this operation.

### To check the remaining or total playing time

Press DISPLAY/DEMO repeatedly. Each time you press DISPLAY/DEMO while playing a CD, the display changes as follows:



#### Note

"- - -" appears in the display when the remaining time is 100 minutes or more.

#### When AUTO indicator is lit

- The CD in the loading position starts playing automatically when you close the front cover.
- The CD in the playing position comes back to the loading position when playing is stopped and you open the front cover.
- When you exchange the CD while playing, the exchanged CD is the next CD to be played and its disc number flashes.

If you don't want to use the auto play function, press AUTO so that the AUTO indicator goes off.

#### One Touch Play feature

Press  $\triangleright$  on the CD player (or CD  $\triangleright$  on the remote) when the power is off. You can listen to the last selected CD without pressing any other buttons when a CD is loaded in the CD player.

If you press  $\triangleright$  or DISC 1 - 5 while another source is selected, the CD player is selected and play starts automatically.

#### The music calendar display

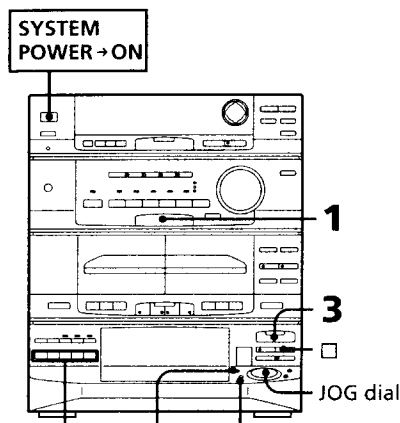
This display lights according to the number of the tracks on the CD. As each track is played, the corresponding number disappears. Tracks numbered 21 or more are not displayed.

### What the orange and red numbers in the disc calendar indicate

- The orange number in the disc calendar indicates the disc number in the playing position. When the CD player is not playing and the AUTO indicator is not lit, the CD whose disc number is orange is the next CD to be played.
- The red number in the disc calendar indicates the disc number in the loading position. You can remove the CD whose disc number is red while playing.

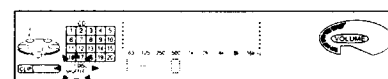
## Playing Tracks in Random Order (shuffle play)

You can play all the tracks on a CD or all CDs in random order.



DISC 1 - 5 CONTINUE 2

- 1 Press FUNCTION repeatedly until "CD" appears in the display.
- 2 Press SHUFFLE to choose "ALL DISCS" or "1 DISC". "ALL DISCS SHUFFLE" or "1 DISC SHUFFLE" appears in the display.



- 3 Press  $\triangleright$  on the CD player (or CD  $\triangleright$  on the remote). "CD" appears and then all the tracks play in random order. To skip to the next track, turn the JOG dial clockwise on the CD player (or press  $\triangleright$  on the remote). To replay the current track, turn the JOG dial counterclockwise on the CD player (or press  $\triangleleft$  on the remote). You cannot replay the previous track.



### To stop playing

Press ☐ (or ☐ on the remote) on the CD player.

### To cancel shuffle play

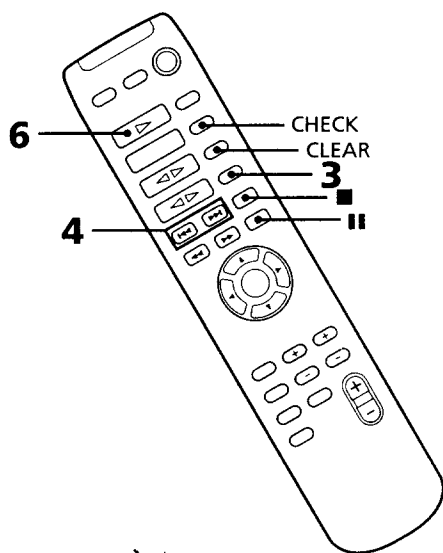
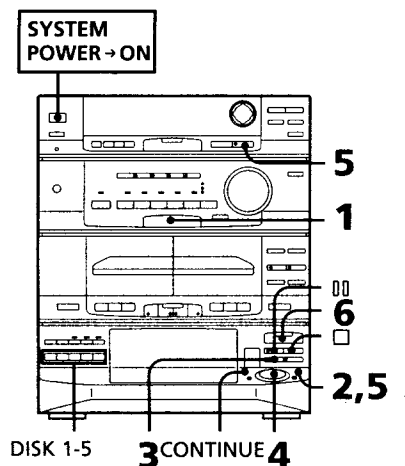
Press CONTINUE.

### To select the desired CD

Press DISC 1–5 on the CD player during "1 DISC SHUFFLE" play.

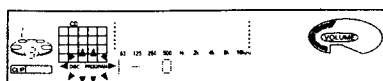
## Playing Tracks in the Desired Order (program play)

You can program up to 32 tracks from all the CDs in the order you want them to be played.



- 1 Press FUNCTION repeatedly until "CD" appears in the display.

- 2 Press PROGRAM.  
"PROGRAM" appears in the display.



- 3 Press DISC SKIP (or D.SKIP on the remote) repeatedly (or DISC 1–5) to choose a CD.

- 4 Turn the JOG dial (or press  /  on the remote) to choose a track.  
The chosen track number appears and the playing time flashes for about 15 seconds in the display.

- 5 Press PROGRAM or ENTER/NEXT.  
The chosen track is programmed and its number appears in the music calendar. If the track number disappears before you press PROGRAM or ENTER/NEXT, go back to step 3.

To program additional tracks from the same CD, repeat steps 4 and 5.

To program additional tracks from another CD, repeat steps 3 to 5.

#### Note

If "----" appears instead of the total playing time, this means:  
–you have programmed a track number which is more than 20, or  
–the total time is 100 minutes or more.

- 6 Press  on the CD player (or CD  on the remote.)  
All the tracks play in the programmed order.

To	Press
Check the program	CHECK on the remote repeatedly*1
Program a pause	<input type="checkbox"/> *2 (or <input type="checkbox"/> on the remote)
Stop play	<input type="checkbox"/> (or <input type="checkbox"/> on the remote)
Cancel program play	CONTINUE*3
Erase a track from the end	CLEAR on the remote in stop mode
Erase a specific track	CHECK on the remote repeatedly so the number of the track appears, and press CLEAR on the remote
Erase the entire program	<input type="checkbox"/> (or <input type="checkbox"/> on the remote) once in stop mode or twice while playing

- \*1 After the last track appears, "CHECK END" appears in the display.  
\*2 "P" appears in the display and the total playing time is reset to 0.00.  
\*3 The program is erased.

### To change the order of programmed tracks

Erase the entire program and create a new one.

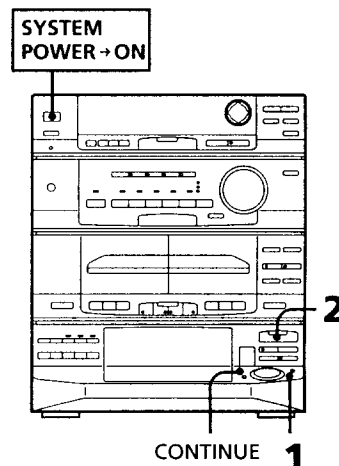
#### The whole program is erased also when:

- you select another play mode.
- you exchange or remove the CDs.

## Playing Tracks Repeatedly (repeat play)

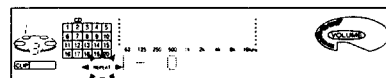
The repeat play function repeats a single CD or all CDs in normal, program, and shuffle play.

In normal play mode only, the CD player can also repeat a single track.



### Repeating all the tracks

- 1 Press REPEAT once so that "REPEAT" appears in the display.



- 2 Press  on the CD player.

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To	Press
Repeat all the tracks on the current CD	CONTINUE repeatedly until "1DISC" appears in the display.
Repeat all the tracks on all CDs	CONTINUE repeatedly until "ALL DISCS" appears in the display.
Repeat only one track (in normal play only)	REPEAT repeatedly until "REPEAT 1" appears in the display while playing the track you want to repeat.

#### To cancel repeat play

Press REPEAT so that "REPEAT" or "REPEAT 1" disappears from the display.

## Playing Tracks by Repeating a Specified Portion (loop play)

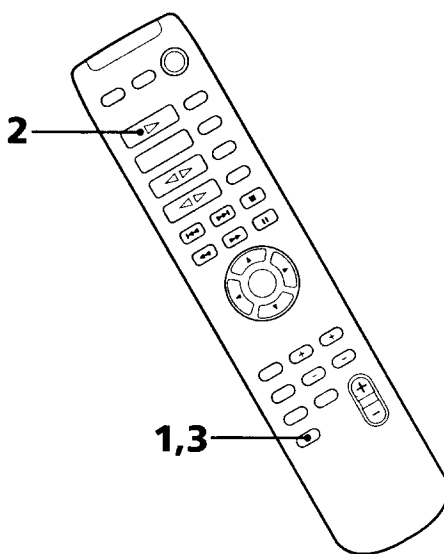
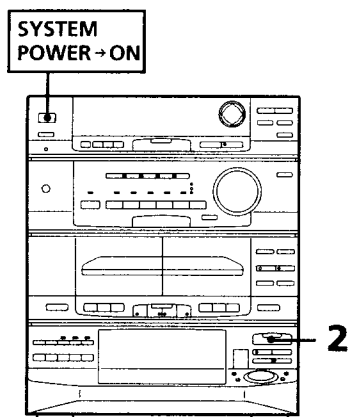
You can make a sampler sound effect by playing a short portion of the track repeatedly (loop play). This is useful for making original dance music tapes.

#### Original song :

"Hey, Come on Everybody!"

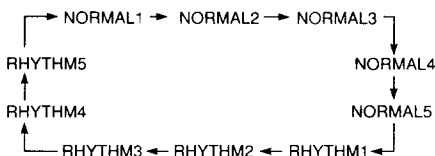
#### When you make the effect :

"Hey, Co Co Co Co Come on Everybody!"



#### 1 Press LOOP on the remote.

You can choose the repeating time from about 0.25 sec. to about 1 sec. for NORMAL 1 – 5 and RHYTHM 1 – 5. For more information on NORMAL and RHYTHM, see "What is the difference between NORMAL and RHYTHM ?" for details.



You can get the longest repeating time by selecting NORMAL (RHYTHM) 5, and the shortest with NORMAL (RHYTHM) 1.

#### 2 Press ▷ on the CD player (or CD ▷ on the remote). The CD player starts playing.

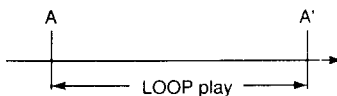
#### 3 Press and hold down LOOP when you hear the portion you want to repeat.

#### What is the difference between NORMAL and RHYTHM

NORMAL differs from RHYTHM in respect to the restarting point of the music when the loop effect ends in step 3. Select the repeating time while CD player is in pause or stop mode.

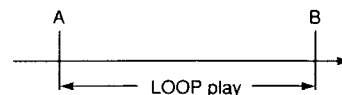
When you play the loop for five seconds

#### NORMAL



In this case, the song restarts at the point that you started the loop (A).

#### RHYTHM



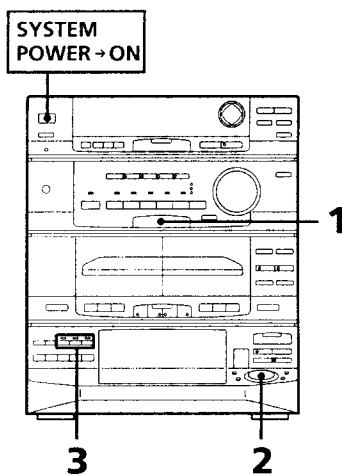
In this case, the song restarts at the point 5 sec. after you started the loop (B).

## Grouping Tracks (music clip)

The music clip function is an easy way to create up to 3 groups of tracks from your CDs. For example, you could store tracks for the morning in CLIP A, tracks for your friends in CLIP B, and tracks for relaxing in CLIP C.

Once you store one or more tracks in a music clip(s), the player recalls those tracks whenever you play the respective disc. Each music clip can store tracks from 10 different CDs even if you have removed or exchanged CDs.

## Storing Tracks in a Music Clip



#### 1 Press FUNCTION repeatedly until "CD" appears in the display.

#### 2 Play the track you want to store by turning the JOG dial to select the track you want.

#### 3 Press CLIP (A, B, or C) to store the track in the desired clip. "CLIP FILE" and the indicator of the music clip you selected appear in the display. Normal playback continues.



- 4 Repeat steps 2 and 3 to store other tracks into the same (or a different) clips.

#### If the memory becomes full

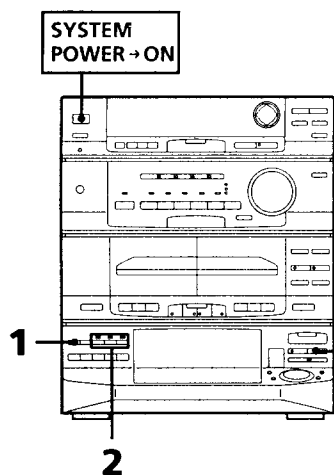
The music clip data for the oldest track is erased to make room for a new track.

#### Notes

- In stop mode, you cannot store tracks in music clips when "SHUFFLE" or "PROGRAM" appears in the display.
- Only tracks numbered 1 - 20 on the disc can be stored in music clips. The tracks numbered 21 or more cannot be stored.

## Playing Tracks in a Music Clip (music clip play)

CLIP (A, B, or C) indicator appears in the display to let you know when tracks on the discs are stored in music clips.



- 1 Press MUSIC CLIP PLAY.  
"SELECT A - C" and "PLAY A - C" appear in the display alternately.
- 2 Press CLIP (A, B, or C).  
"CLIP PLAY" and the selected music clip indicator appear in the display.  
The player starts playing tracks from the selected music clip.  
You can see the tracks in the music clip with music calendar.

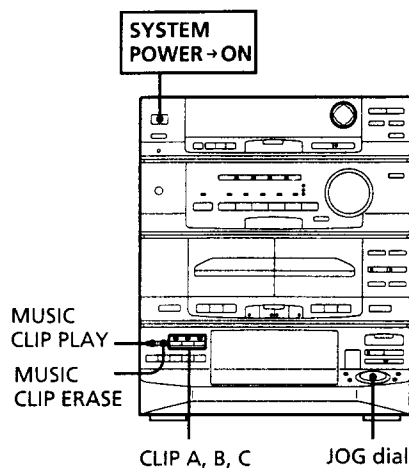
#### To cancel clip play

Press ☐ on the CD player.

#### Notes

- In 1 DISC mode, the tracks stored for the selected disc are played back once, then clip play is canceled.
- In ALL DISCS mode, all the tracks stored for the currently loaded discs are played back once, then clip play is canceled.
- You cannot start clip play if "PROGRAM" appears in the display.

## Erasing Tracks from a Music Clip



#### Erasing a track

- 1 Press MUSIC CLIP PLAY.
- 2 Press CLIP (A, B, or C) for the clip containing the tracks you want to erase.
- 3 Use the JOG dial to select the track you want to erase.
- 4 Press MUSIC CLIP ERASE while the track you want to erase is being played.  
"ERASE A - C" and "TRACK A - C" appear alternately in the display and the selected CLIP indicator flashes.
- 5 Press the same CLIP button you pressed in step 2 again while the indicator is flashing.  
Playing stops and the selected track is erased.

#### Erasing all the tracks in CLIP A (B or C)

- 1 In stop mode, press MUSIC CLIP ERASE.  
"ERASE A - C" and "ALL A - C" appear alternately in the display, and all the music clip indicators flash.
- 2 Press CLIP (A, B, or C) to specify the music clip you want to erase.  
"PUSH" and the selected "CLIP (A, B or C)" appear in the display.
- 3 Press the same CLIP button you pressed in step 2 again.

#### Note

You cannot erase tracks from a music clip if the disc containing these tracks is not in the playing position.

# Chapter 3: the Radio

## Listening to the Radio

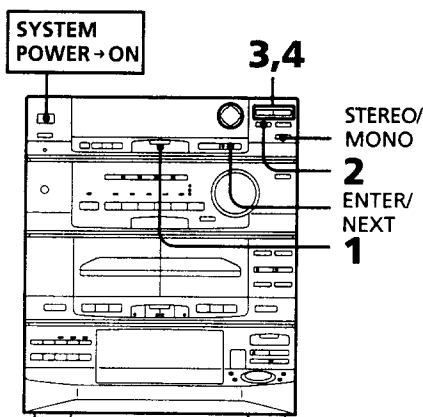
### Presetting Radio Stations

### Playing Preset Radio Stations

## Listening to the Radio

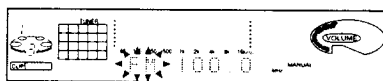
When you want to listen to a radio program, you can have the tuner automatically scan the radio frequencies and tune in the stations with clear signals. This feature saves you time in searching for stations with clear signals.

However, stations with weak signals may be skipped by automatic tuning. Manually tune in stations with weak signals.

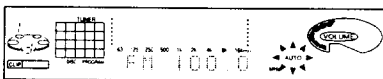


- 1 Press TUNER/BAND repeatedly until the band you want appears in the display. Each time you press this button, the band changes as follows:

FM  $\longleftrightarrow$  AM

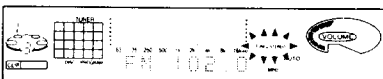


- 2 Press TUNING MODE repeatedly until "AUTO" appears in the display.



- 3 Press TUNING +/- (or  $\llcorner$  /  $\lrcorner$  on the remote).

The tuner starts scanning radio frequencies, and stops when it finds a clear station. "TUNED" appears in the display. "STEREO" also appears if the FM station tuned in is broadcasting in stereo.



- 4 If you don't want to listen to the selected station, press TUNING +/- (or  $\llcorner$  /  $\lrcorner$  on the remote) to restart the scan.

### When the desired station is not tuned in

Automatic tuning may skip the stations with weak signals and continue scanning without a stop. In this case, tune in the station manually.

- 1 Press TUNING MODE repeatedly until "MANUAL" appears in the display.
- 2 Press TUNING +/- (or  $\llcorner$  /  $\lrcorner$  on the remote) repeatedly until the desired station is tuned in.

### To improve AM broadcast reception

Reorient the supplied AM loop antenna for AM.



### To change the AM tuning interval

The AM tuning interval is preset to 10 kHz at the factory. If you need to change the interval to 9 kHz, do as follows:

- 1 Turn on the power.
- 2 Change the band to AM.
- 3 Turn off the power.
- 4 Turn the power back on while pressing ENTER/NEXT.

After changing the AM tuning interval, reset the preset AM radio stations.

### When an FM program is not received clearly

Press STEREO/MONO so that "MONO" appears in the display. There will be no stereo effect, but the reception will improve. Press STEREO/MONO again to restore the stereo effect.

### One Touch Play feature

Press TUNER/BAND (or TUNER/BAND on the remote) when the power is off or when you are listening to another sound source.

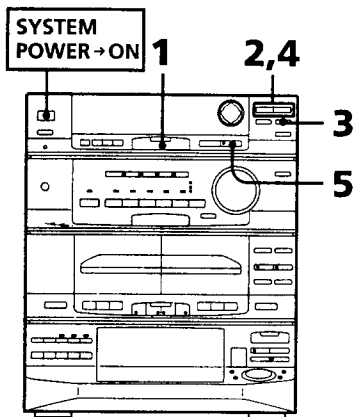
You can listen to the last received station without pressing any other buttons.

### Note

When you listen to a sound source other than the tuner, you can select the tuner by pressing TUNER/BAND (Automatic Source Selection).

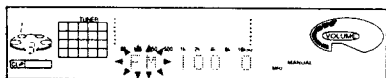
## Presetting Radio Stations

You can store radio frequencies in the tuner's memory to tune in your favorite stations quickly. You can preset up to 20 FM stations and 10 AM stations in any order.



- 1 Press TUNER/BAND repeatedly until the band you want appears in the display.

FM ↔ AM

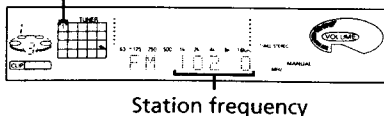


- 2 Press TUNING +/- to tune in the station you want to store.
- 3 Press TUNER MEMORY. "MEMORY" appears and the preset channel number flashes in the display.



- 4 Press TUNING +/- to display the preset channel number you want to store.
- 5 Press ENTER/NEXT. "MEMORY" disappears, and the station is stored in the preset channel number you decided on.

Preset channel number



- 6 Repeat steps 1 to 5 for each station you want to store.

### To erase a stored station

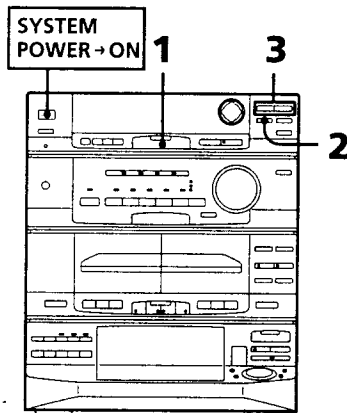
Store a new station in the preset station number. It will erase the old station and replace it with the new station.

### If you have trouble storing a station

Make sure "MEMORY" appears in the display. If not, press TUNER MEMORY again so that "MEMORY" appears (for about eight seconds) in the display, and then proceed with steps 4 and 5.

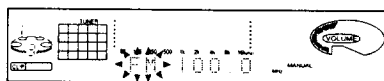
## Playing Preset Radio Stations

Once you have preset the stations, use the TUNING +/- (or ◀▶ on the remote) to quickly tune in your favorite stations.

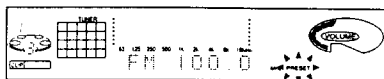


- 1 Press TUNER/BAND (or TUNER/BAND on the remote) repeatedly until the band you want appears in the display.

FM ↔ AM

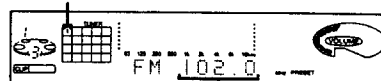


- 2 Press TUNING MODE repeatedly so that "PRESET" appears in the display.



- 3 Press TUNING +/- (or ◀▶ on the remote) to tune in a preset station. The station frequency appears and the station begins broadcasting.

Preset channel number



Station frequency

# Chapter 4: the Tape Player

## Playing a Tape

## Recording a CD

## Recording a CD: Selecting Tape Length (tape select edit)

## Recording a CD: Specifying Tape Length (time edit)

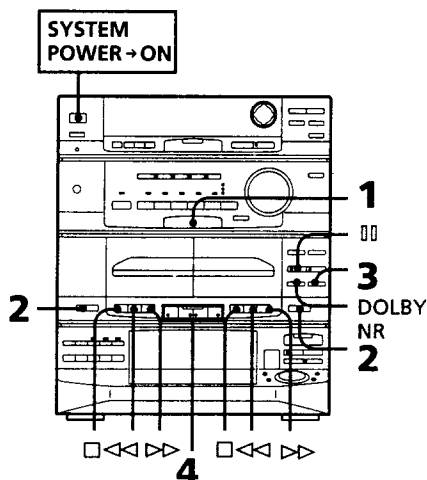
## Recording a CD: Specifying Track Order (program edit)

## Recording From the Radio

## Recording From Another Tape (dubbing)

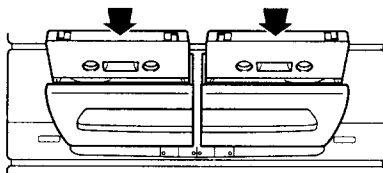
## Playing a Tape

You can use TYPE I (normal) and TYPE II (CrO<sub>2</sub>) tapes. When you insert a tape, the deck detects the tape type automatically.



**1** Press FUNCTION repeatedly until "TAPE" appears in the display.

**2** Press  $\square$  EJECT to open the tape compartment. Insert a recorded tape in deck A or B with the tape side facing down and the side you want to play facing forward. Push to close the compartment.



**3** Press DIRECTION to choose single-side, dual-side, or relay play. The DIRECTION setting affects both decks.

To play	Press DIRECTION to select
One side	$\Rightarrow$
Both sides*	$\Leftrightarrow$
Both decks in succession**	RELAY

\* The deck stops automatically after repeating the sequence five times.

\*\*See "To play both decks in succession (relay play)."

**4** Press  $\triangleright$  (to play the front side) or  $\triangleleft$  (to play the reverse side) on the tape player.

The tape starts playing.

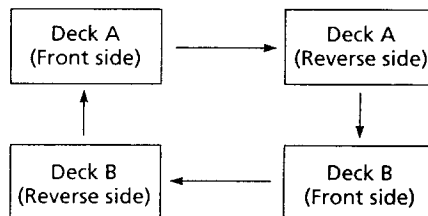
To	Press
Stop play	$\square$
Pause (deck B only)	$\square\square$
Resume play after pause	$\square\square$ , $\triangleleft$ or $\triangleright$
Fast forward	$\triangleright\triangleright$ for front side $\triangleleft\triangleleft$ for reverse side
Rewind	$\triangleleft\triangleleft$ for front side $\triangleright\triangleright$ for reverse side
Remove the cassette	$\square$ EJECT

## To control the remote

- Press DECK A  $\triangleleft\triangleright$  or DECK B  $\triangleleft\triangleright$  to play the front side and press DECK A  $\triangleleft\triangleright$  or DECK B  $\triangleleft\triangleright$  again to play the reverse.
- Press the desired operation button.

## To play both decks in succession (relay play)

Relay play is according to the following sequence. When the reverse side of the tape in deck B finishes playing, the sequence continues four more times.



- Press  $\square$  EJECT and insert recorded tapes in both decks.
- Press DIRECTION repeatedly until "RELAY" appears in the display.
- Press  $\triangleleft$  or  $\triangleright$  on either deck. To stop relay play, press  $\square$ .

## To cancel relay

Press DIRECTION repeatedly until " $\Leftrightarrow$ " or " $\square\square$ " appears in the display.

## When listening to a tape recorded with the Dolby® B-type noise reduction system

Press DOLBY NR button so that "DOLBY NR B" appears in the display. The settings affects both decks. Dolby noise reduction system reduces tape hiss noise in low-level high-frequency signals.

\* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation. "DOLBY" and the double-D symbol  $\square\square$  are trademarks of Dolby Laboratories Licensing Corporation.

### One Touch Play Feature

Press ◀ or ▶ on the tape player (or DECK A ◀▶ / DECK B ◀▶ on the remote) when the power is off.

When a tape is in the player, you will immediately be able to listen to the tape without pressing any other buttons. If no tape is inserted, the system will just turn on.

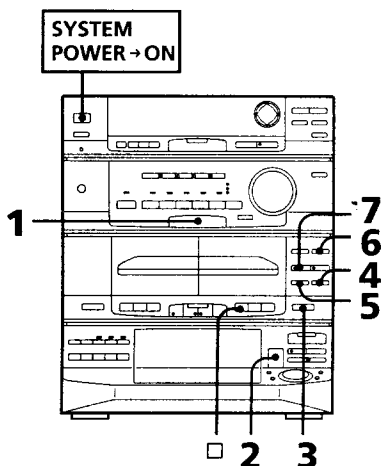
The tape player always starts playing from the front side of the tape when you operate the remote.

## Recording a CD

You can record from a CD to a tape. Use TYPE I (normal) or TYPE II (CrO<sub>2</sub>) tapes. You cannot listen to other sources while recording.

### Recording a CD automatically

By using CD SYNCHRO, you can record from a CD to a tape easily. Use the buttons on the unit for this operation.



**1** Press FUNCTION repeatedly until "CD" appears in the display.

**2** Press OPEN and load a CD on the tray. Make sure the disc number in the playing position in the display is the one you want to record. The total number of tracks and the playing time appear in the display.

**3** Press EJECT and insert a blank tape into deck B with the side you want to record on facing forward. Recording starts from the front side of the tape, unless you change the playing direction before recording. Make sure the tabs on the cassette have not been removed.

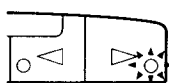
**4** Select dual or single sided recording.

To record	Press DIRECTION to select
One side	→
Both sides*	↔ or RELAY

\* Recording always stops at the end of the reverse side. Be sure to start from the front side.

**5** When you want to reduce the hiss noise in low-level high-frequency signals, Press DOLBY NR so that "DOLBY NR B" appears in the display.

**6** Press CD SYNCHRO. The REC and ⏸ (pause) lamps light up and deck B stands by for recording. The ▶ lamp lights up and the ◀ lamp flashes for a few seconds, then goes off.



Side in recording pause mode

If you want to start recording from the reverse side, press ◀ so that the ◀ lamp lights steadily.

**7** Press ⏸ on the tape player to release recording pause. Recording starts. After about 10 seconds, the CD starts playing.

#### To stop recording

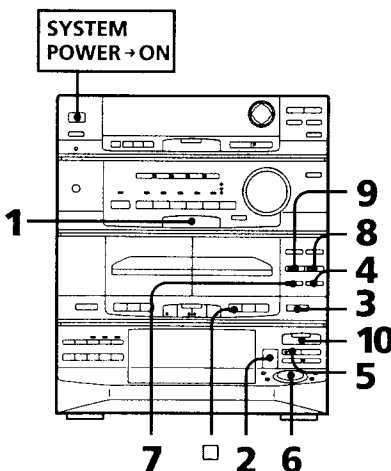
Press □ on the tape player.

#### To record with the surround effect

Press DSP MODE on the remote so that "SUR 1 (|||||)", "SUR 2 (|||||)", or "SUR 3 (|||||)" appears in the display. Any adjustment to the equalizer you have made will not be recorded.

## Recording a CD Manually

You can record a CD as you like, for example, record just the songs you want or record from the middle of the tape.



**1** Press FUNCTION repeatedly until "CD" appears in the display.

**2** Press OPEN and load a CD on the tray. Make sure the disc number in the playing position in the display is the one you want to record. The total number of tracks and the playing time appear in the display.

**3** Press EJECT and insert a blank tape into deck B with the side you want to record on facing forward. Recording starts from the front side of the tape, unless you change the playing direction before recording. Make sure the tabs on the cassette have not been removed.

**4** Select dual or single sided recording.

To record	Press DIRECTION to select
One side	→
Both sides*	↔ or RELAY

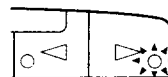
\* Recording always stops at the end of the reverse side. Be sure to start from the front side.

**5** If you want to record a specific track of the CD, press ⏸ on the CD player. The CD player pauses for playing. If you do not need to choose a track, skip to step 7.

**6** Turn the JOG dial to choose the track you want to record.

**7** When you want to reduce the hiss noise in low-level high-frequency signals, Press DOLBY NR so that "DOLBY NR B" appears in the display.

**8** Press REC. The REC and ⏸ (pause) lamps light up and deck B stands by for recording. The ▶ lamp lights up and the ◀ lamp flashes for a few seconds, then goes off.



Side in recording pause mode

If you want to start recording from the reverse side, press ◀ so that the ◀ lamp lights steadily.

**9** Press ⏸ on the tape player to release recording pause. Recording starts.

**10** Press ▶ on the CD player. The CD player starts playing.

To	Press
Stop recording	□
Pause recording	⏸

**continue to next page →**

## → continued

### To record with the surround effect

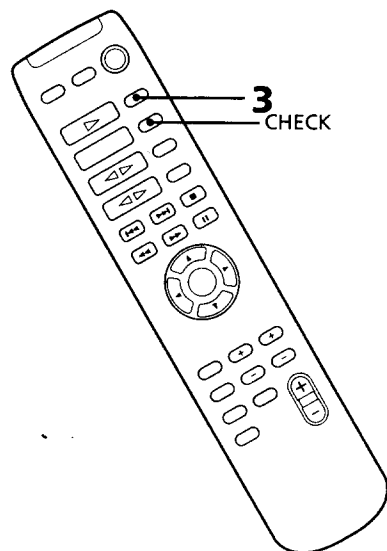
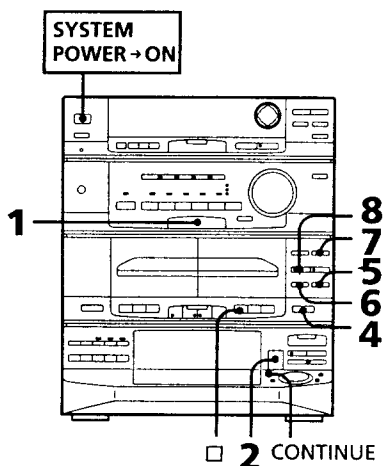
Press DSP on the remote so that "SUR 1 (( ))", "SUR 2 (( ))", or "SUR 3 (( ))" appears in the display. Any adjustments to the equalizer you have made will not be recorded.

### Note

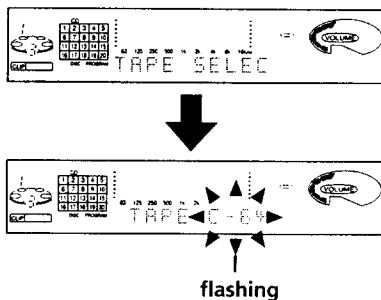
If you want to record specific tracks of the CD, the "program edit" feature will make it easier.

## Recording a CD: Selecting Tape Length (tape select edit)

You can have the stereo system select and indicate the most suitable tape length for recording each disc automatically. You cannot use tape select edit for discs which contain 21 tracks or more.



- 1 Press FUNCTION repeatedly until "CD" appears in the display.
- 2 Press  $\square$  OPEN and load a CD on the tray. Make sure the disc number in the playing position in the display is the one you want to record. The total number of tracks and the playing time appear in the display.
- 3 Press EDIT on the remote. "TAPE SELECT" appears in the display, and tape player divides the selections automatically. Then the display changes as follows:



- 4 Press  $\square$  EJECT and insert a blank tape of the indicated length (or longer) into deck B with the side you want to record facing forward. Recording will start from the front side of the tape, unless you have changed the playing direction before recording. Make sure the tabs on the cassette have not been removed.

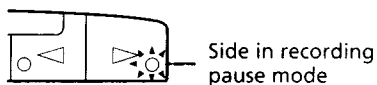
- 5 Select dual or single sided recording.

To record	Press DIRECTION to select
One side	→
Both sides*	↔ or RELAY

\* Recording always stops at the end of the reverse side. Be sure to start from the front side.

- 6 When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR B" appears in the display.

- 7 Press CD SYNCHRO. The REC and  $\square$  (pause) lamps light up and deck B stands by for recording. The  $\triangleright$  lamp lights up and the  $\triangleleft$  lamp flashes for a few seconds, then goes off.



If you want to start recording from the reverse side, press  $\triangleleft$  so that the  $\triangleleft$  lamp lights steadily.

- 8 Press  $\square$  on the tape player to release recording pause. Recording starts. After about 10 seconds, the CD player starts playing.

### To stop recording

Press  $\square$  on the tape player.

### To check the order

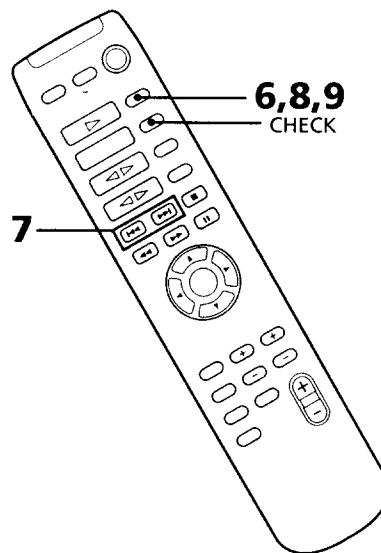
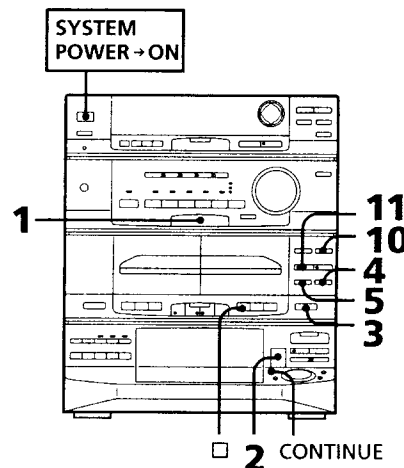
Press CHECK on the remote.

### To cancel tape select edit

Press CONTINUE on the CD player.

## Recording a CD: Specifying Tape Length (time edit)

You can have the stereo system create programs based on the tape length. For example, if you use a 46-minute tape to record a 50-minute CD, the CD player will automatically choose as many tracks as possible to fit within the 46-minute tape. The player will not program those tracks beyond track number 20. Use the buttons on both the unit and the remote for this operation.





- 1 Press **FUNCTION** repeatedly until "CD" appears in the display.
- 2 Press **OPEN** and load a CD on the tray. Make sure the disc number in the playing position in the display is the one you want to record. The total number of tracks and the playing time appear in the display.

- 3 Press **EJECT** and insert a blank tape into deck B with the side you want to record on facing forward. Recording starts from the front side of the tape, unless you change the playing direction before recording. Make sure the tabs on the cassette have not been removed.

- 4 Select dual or single sided recording.

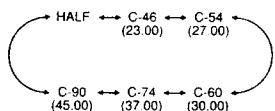
To record	Press <b>DIRECTION</b> to select
One side	
Both sides*	or <b>RELAY</b>

\* Recording always stops at the end of the reverse side. Be sure to start from the front side.

- 5 When you want to reduce the hiss noise in low-level high-frequency signals, press **DOLBY NR** so that "DOLBY NR B" appears in the display.

- 6 Press **EDIT** twice. "TIME EDIT" then "SELECT" and "TIME" appear alternately in the display.

- 7 Press **HALF** on the remote to designate the tape length or "HALF". As you press the button, the display changes as follows:



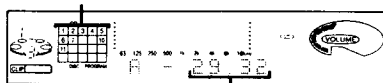
Choose "HALF" if you want the CD player to record half of the total playing time of the CD in the original order. You cannot select "HALF" when recording CDs with more than 20 tracks. "PUSH EDIT" and half of the total time of the tape you selected appears in the display.



Half of the total time of the tape

- 8 Press **EDIT** on the remote. The CD player determines the tracks to be recorded on side A automatically. The total time and tracks to be recorded on side A appears in the display.

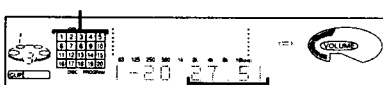
Tracks to be recorded on side A



Total playing time on side A

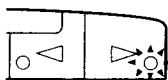
- 9 When you want to record on both sides, press **EDIT** again. The CD player determines the tracks to be recorded on side B.

Tracks to be recorded on both sides



Total playing time on side B

- 10 Press **CD SYNCHRO**. The **REC** and **PAUSE** lamps light up and deck B stands by for recording. The **PAUSE** lamp lights up and the **PAUSE** lamp flashes for a few seconds, then goes off.



Side in recording pause mode

If you want to start recording from the reverse side, press **REVERSE** so that the **REVERSE** indicator lights steadily.

- 11 Press **PAUSE** on the tape player to release recording pause. Recording starts. After about 10 seconds, the CD player starts playing.

#### To stop recording

Press **PAUSE** on the tape player.

#### To check the order

Press **CHECK** on the remote repeatedly. Each time you press **CHECK**, the number of the programmed tracks appear in the display.

#### To cancel time edit

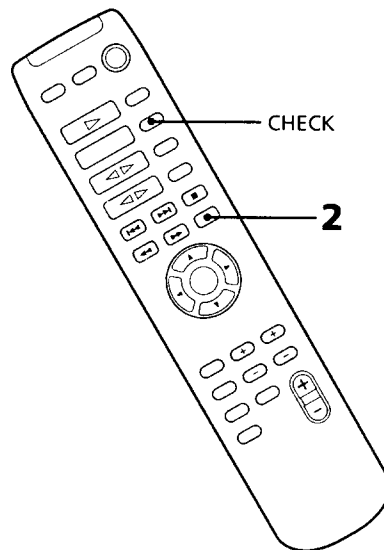
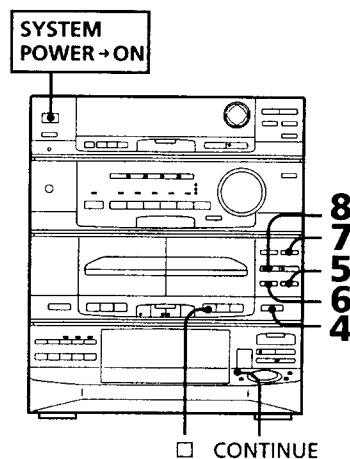
Press **CONTINUE** on the CD player.

#### To select the desired tracks beforehand

You can record certain tracks (up to 20) first by selecting them before time editing. See "Playing Tracks in the Desired Order (program play)."

## Recording a CD: Specifying Track Order (program edit)

You can adjust the total recording time to the tape length while making a program.



- 1 Following the procedure "Playing Tracks in the Desired Order (program play)," program the tracks you want to record for side A. Make sure to program the tracks so that the total playing time of the side A does not exceed the tape length of one side.
- 2 Press **PAUSE** on the remote to pause recording at the end of the side A. "P" appears in the display. The total playing time "0.00" appears in the display.
- 3 Program the tracks you want to record for side B in the same way as you did for side A.

**continue to next page →**

→ **continued**

- 4** Press  $\triangle$  EJECT and insert a blank tape into deck B with the side you want to record on facing forward. Recording will start from the front side of the tape, unless you have changed the playing direction before recording. Make sure the tabs on the cassette have not been removed.

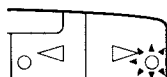
- 5** Select dual or single sided recording.

To record	Press DIRECTION to select
One side	$\rightarrow$
Both sides*	$\leftrightarrow$ or RELAY

\* Recording always stops at the end of the reverse side. Be sure to start from the front side.

- 6** When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR B" appears in the display.

- 7** Press CD SYNCHRO. The REC and  $\square$  (pause) lamps light up and deck B stands by for recording. The  $\triangleright$  lamp lights up and the  $\triangleleft$  lamp flashes for a few seconds, then goes off.



Side in recording pause mode

If you want to start recording from the reverse side, press  $\triangleleft$  so that the  $\triangleleft$  lamp lights steadily.

- 8** Press  $\square$  on the tape player to release recording pause. Recording starts. After about 10 seconds, the CD player starts playing.

#### To stop recording

Press  $\square$  on the tape player.

#### To check the order

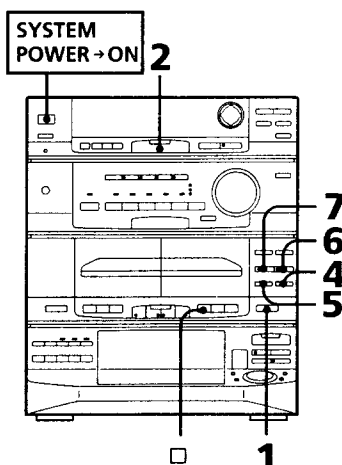
Press CHECK on the remote repeatedly. Each time you press CHECK, the number of the programmed tracks appear in the display.

#### To cancel program edit

Press CONTINUE on the CD player.

## Recording From the Radio

You can record from the tuner onto a tape. Use TYPE I (normal) or TYPE II (CrO<sub>2</sub>) tapes.



- 1** Press  $\triangle$  EJECT and insert a blank tape into deck B with the side you want to record on facing forward. Recording starts from the front side of the tape, unless you change the playing direction before recording. Make sure the tabs on the cassette have not been removed.

- 2** Press TUNER/BAND several times until the desired radio band appears.

- 3** Tune in the radio station you want to record. (See "Listening to the Radio" or "Playing Preset Radio Stations" for details.)

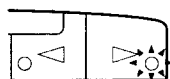
- 4** Select dual or single sided recording.

To record	Press DIRECTION to select
One side	$\rightarrow$
Both sides*	$\leftrightarrow$ or RELAY

\* Recording always stops at the end of the reverse side. Be sure to start from the front side.

- 5** When you want to reduce the hiss noise in low-level high-frequency signals, press DOLBY NR so that "DOLBY NR B" appears in the display.

- 6** Press REC. The REC and  $\square$  (pause) lamps light up and deck B stands by for recording. The  $\triangleright$  lamp lights up and the  $\triangleleft$  lamp flashes for a few seconds, then goes off.



Side in recording pause mode

If you want to start recording from the reverse side, press  $\triangleleft$  so that the  $\triangleleft$  lamp lights steadily.

- 7** Press  $\square$  on the tape player to release recording pause. Recording starts.

#### To stop recording

Press  $\square$  on the tape player.

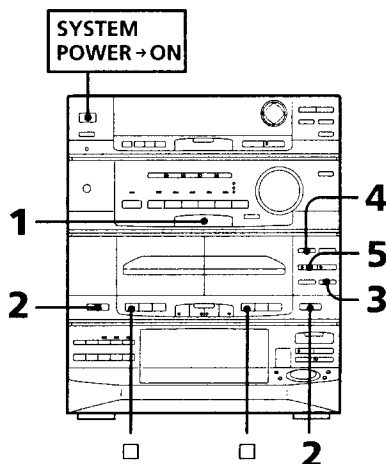
#### To reduce noise during AM recording

If a whistling noise is heard while recording, reorient the AM loop antenna for optimum reception.

## Recording From Another Tape (dubbing)

### Dubbing Another Tape Automatically

You can record an entire tape onto another automatically by using high speed dubbing. Use the buttons on the unit and TYPE I (normal) or TYPE II (CrO<sub>2</sub>) tapes for dubbing.



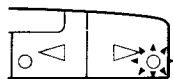
- 1** Press FUNCTION repeatedly until "TAPE" appears in the display.

- 2** Press  $\triangle$  EJECT and insert a recorded tape in deck A with the side you want to play facing forward. Also, insert a blank tape in deck B with the side you want to record on facing forward. Recording and playback will start from the front side of the tape, unless you change the playing direction before recording. Make sure the tabs on the cassette in deck B have not been removed.

- 3** Choose how you want the tape to record and press **DIRECTION** repeatedly until the desired mode appears.

Position	Operation
	Dubbing stops at the end of one side
	When the tape in one deck comes to the end of the front side, it reverses immediately regardless of the tape position in the other deck.
RELAY	When the tape in one deck reaches its end of the front side, it stops until the other tape comes to its end, and then both tapes reverse together.

- 4** Press **HIGH SPEED DUBBING**.  
The REC and (pause) lamps light and deck B stands by for recording.  
The lamp lights up and the lamp flashes for a few seconds, then goes off.



Side in recording pause mode

If you want to start recording from the reverse side, press so that the lamp lights steadily.

- 5** Press on the tape player.  
The tape player starts dubbing at high speed.  
If you set **DIRECTION** to or **RELAY**, recording always stops at the end of the reverse side.

#### To stop dubbing

Press on deck A or deck B.

#### If you select another sound source while dubbing

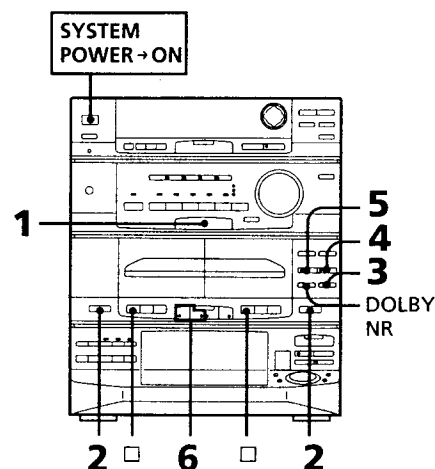
Dubbing stops.

#### You do not have to press **DOLBY NR** with high speed dubbing

The tape in deck B is automatically recorded in the same state as the tape in deck A.

## Dubbing Another Tape Manually

When you want to dub only part of the tape, dub manually at normal speed. Use the buttons on the unit and **TYPE I** (normal) or **TYPE II** (CrO<sub>2</sub>) tapes for recording.



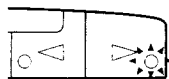
- Press **FUNCTION** repeatedly until "TAPE" appears in the display.
- Press **EJECT** and insert a recorded tape in deck A with the side you want to play facing forward.  
Also, insert a blank tape in deck B with the side you want to record on facing forward.  
Recording and playing will start from the front side of the tape, unless you have changed the playing direction before recording.  
Make sure the tabs on the cassette in deck B have not been removed.

- 3** Select dual or single sided recording.

To dub	Press <b>DIRECTION</b> to select
One side	
Both sides*	or <b>RELAY</b>

\* Recording always stops at the end of the reverse side. Be sure to start from the front side.

- 4** Press **REC**.  
The REC and (pause) lamps light up and deck B stands by for recording.  
The lamp lights up and the lamp flashes for a few seconds, then goes off.



Side in recording pause mode

If you want to start recording from the reverse side, press so that the lamp lights steadily.

- 5** Press on the tape player to release recording pause.  
Recording starts on deck B.  
If you set **DIRECTION** to or **RELAY**, recording always stops at the end of the reverse side.

- 6** Press or on deck A.  
The tape on deck A starts playing.

#### To stop dubbing

Press on deck A or deck B.

#### Notes

- When dubbing tapes originally recorded with **Dolby NR B**, the dubbed tape is automatically recorded with **Dolby NR B**.
- When you want to record a tape recorded without **Dolby NR B** onto another tape using **Dolby NR B**, press **DOLBY NR** so that "DOLBY NR B" appears in the display.

# Chapter 5: Sound Adjustment

## Adjusting the Sound

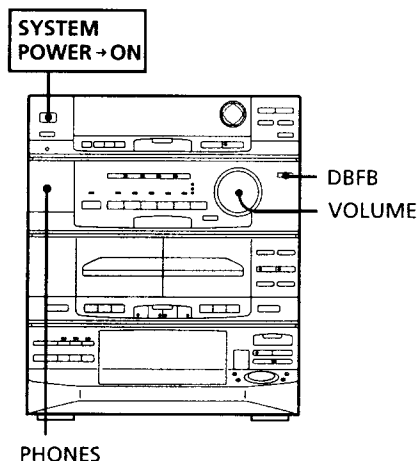
### Selecting the Audio Emphasis

### Adjusting the Audio Emphasis

### Making a Personal Audio Emphasis File (personal file)

## Adjusting the Sound

To fully enjoy the sound coming from your stereo system, you can make the following audio adjustments. See the sections following this one for additional sound adjustments.



### To adjust the volume

Turn VOLUME on the amplifier clockwise or counterclockwise to increase or decrease the sound, or press VOLUME +/- on the remote.

### To reinforce bass

Press DBFB\* repeatedly and choose DBFB or DBFB .

"DBFB " is more effective than "DBFB .

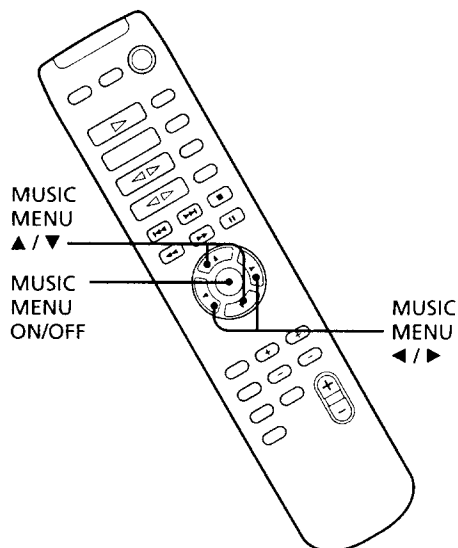
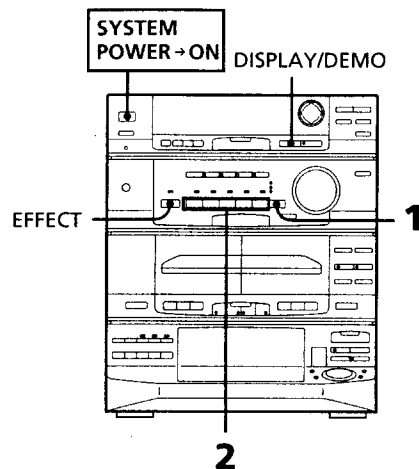
\* DBFB = Dynamic Bass Feedback

### To listen through the headphones

Connect the headphones to the PHONES jack. No sound will come from the speakers.

## Selecting the Audio Emphasis

Your stereo system has been factory set to ten specially recommended audio emphasis settings. Choose from among these ten preset settings according to the type of music you are listening to.



**1** Press FILE SELECT (MUSIC MENU ▲ / ▼ on the remote) repeatedly to select SELECT 5 or MORE 5. The SELECT 5 or MORE 5 indicator lights up.

**2** Press one of the FILE 1 – 5 buttons on the unit (or MUSIC MENU ◀ / ▶ on the remote). The indicator of the selected preset setting lights up. The effects of preset settings are as follows:

Press	To get (from SELECT 5)	To get (from MORE 5)
FILE 1	ROCK	GAME
FILE 2	POPS	DANCE
FILE 3	JAZZ	STADIUM
FILE 4	CLASSIC	STUDIO
FILE 5	SALSA	CHURCH

"SUR 1 {|||||}" , "SUR 2 {|||||}" , or  
"SUR 3 {|||||}" appears in the display if  
you select an effect with surround effects.

#### To cancel the audio emphasis

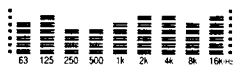
Press EFFECT (or MUSIC MENU ON/OFF  
on the remote) once so that the EFFECT  
indicator and the selected preset setting  
indicator go off.

"EFFECT OFF" appears in the display.

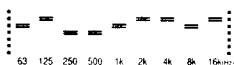
#### To change the equalizer display

Each time you hold down  
DISPLAY/DEMO for a few seconds, the  
equalizer display changes to show one of  
the following displays:

##### Spectrum analyzer 1



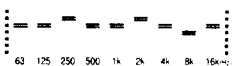
##### Spectrum analyzer 2



##### Spectrum analyzer 3



##### Graphic equalizer curve



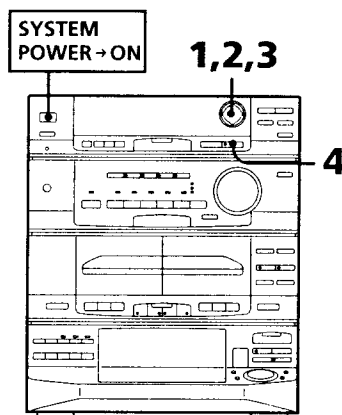
## Adjusting the Audio Emphasis

You can adjust the audio emphasis using  
the following two functions:

- Graphic equalizer
- Surround effect

### Adjusting the Sound (graphic equalizer)

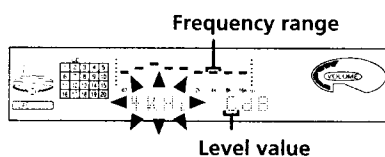
This feature lets you adjust the audio  
emphasis by raising and lowering the level  
of frequency ranges. Before operation, first  
select the audio emphasis you want for  
your basic sound.



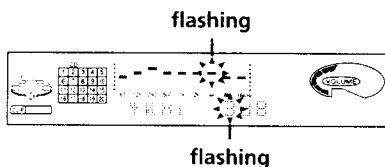
- 1 Press one of ◀, ▶, ▲, or ▼ (CURSOR CONTROL).

The frequency range appears and the  
level value flashes in the display.

- 2 Press ◀ or ▶ to select the frequency  
range you want to change.



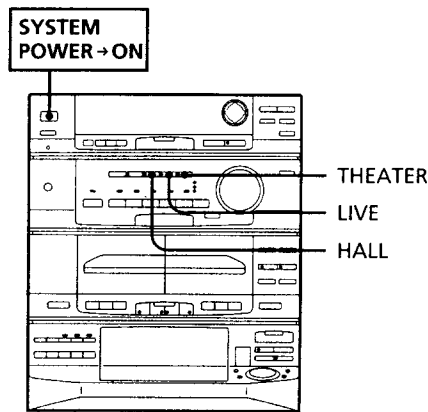
- 3 Press ▲ or ▼ to raise or lower the level  
of the frequency ranges.



- 4 Repeat steps 2 and 3 to adjust other  
frequency ranges and press ENTER/  
NEXT.

## Activating the Sound Field (surround effect)

You can use the surround effect without  
connecting the surround speakers. Before  
operation, first select the audio emphasis  
you want for your basic sound.



#### To turn on the surround effect

Press one of the programmed surround  
effect buttons (HALL, LIVE or THEATER)  
on the amplifier or DSP MODE on the  
remote.

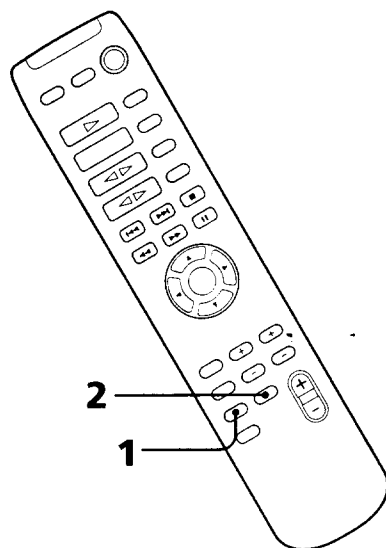
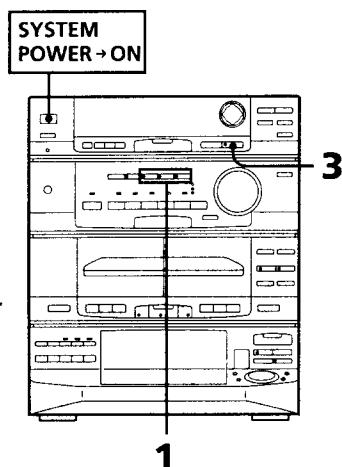
When the mode is	You will hear
HALL (SUR 1 {     })	A reverberation effect that simulates the acoustics of a large concert hall.
LIVE (SUR 2 {     })	An effect that simulates the presence of a live concert.
THEATER (SUR 3 {     })	An effect that simulates the presence of a movie theater.

#### To turn off the programmed surround effect

Press the lighted programmed surround  
effect button (HALL, LIVE, or THEATER)  
on the amplifier.  
Or press DSP MODE on the remote  
repeatedly until "SURROUND OFF"  
appears in the display.

## Adjusting the Sound Field

Your stereo has been set to three recommended surround effects. Choose from among these three programmed settings according to the type of software you have.



- 1 Press one of the programmed surround effect buttons (HALL, LIVE, or THEATER) on the amplifier, or DSP MODE on the remote repeatedly until your desired programmed surround effect appears in the display. Each time you press DSP MODE, the display changes as follows:

HALL → LIVE → THEATER  
↑  
SURROUND OFF ↓

- 2 Press DSP LEVEL on the remote to select the DSP level. Each time you press DSP LEVEL, the level changes as follows:

LEVEL 0 → LEVEL 1 → LEVEL 2 → LEVEL 3  
↑

Surround effect becomes stronger in order of LEVEL 0, LEVEL 1, LEVEL 2, and LEVEL 3.

- 3 Press ENTER/NEXT.

### To turn off the programmed surround effect

Press the lighted programmed surround effect button (HALL, LIVE, or THEATER) on the amplifier.

Or press DSP MODE on the remote repeatedly until "SURROUND OFF" appears in the display.

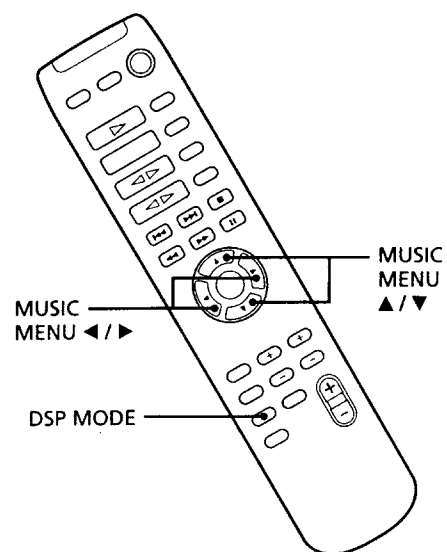
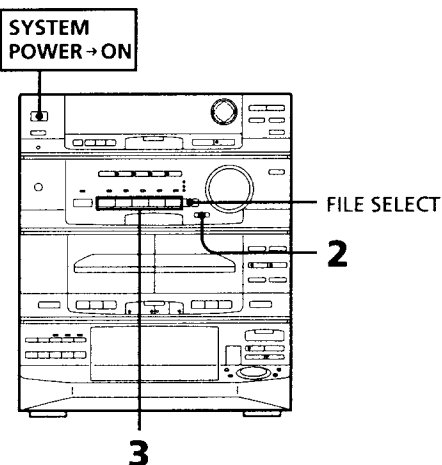
#### Note

When you choose another sound effect, the surround effects will be canceled.

If you want to keep the sound effect you selected, store it into a personal file. See "Making a Personal Audio Emphasis File (personal file)."

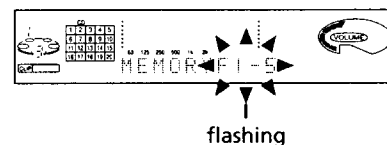
## Making a Personal Audio Emphasis File (personal file)

You can create up to five personal audio emphasis files and store them in the player's memory. Later, call up an audio pattern to play a favorite tape, CD, or radio program.



- 1 Adjust the audio emphasis to your preference (See "Selecting the Audio Emphasis" or "Adjusting the Audio Emphasis" for details).

- 2 Press MEMORY. "MEMORY" appears and "F 1 - 5" flashes in the display.



- 3 Press one of the FILE 1 - 5 buttons. "MEMORY" disappears and the number of the personal file you selected appears in the display.

### To call up a personal file

Press FILE SELECT (or MUSIC MENU ▲/▼ on the remote) repeatedly until the P FILE indicator lights up. Then press one of the FILE 1 - 5 (or MUSIC MENU </> on the remote).

### To erase a personal file

Store a new audio emphasis setting over the personal file you want to erase.

#### Note

If you press DSP MODE on the remote when you choose one of the preset settings (SELECT 5 and MORE 5), the preset setting will be canceled automatically.

# Chapter 6:

## Dolby Pro Logic Surround

### What is Dolby Pro Logic Surround

### Connecting Optional Video Equipment

### Enjoying Dolby Pro Logic Surround Effects

## What is Dolby Pro Logic Surround

### New Dolby Surround standard

Dolby Surround is basically a home theater audio system. Dolby Pro Logic Surround is a new standard from Dolby Laboratories Licensing Corporation. It improves sound image by using four separate channels: off-screen audio effects, on-screen dialogue, left-to-right panning, and music.

As a result, sound imaging has greatly improved directional accuracy, especially in the case of movie sound effects. You can feel as if you were in the scene. The Dolby Pro Logic Surround can be set to one of three modes depending on the arrangement of your speaker system: NORMAL, PHANTOM, and 3CH LOGIC. The low bass sound will come out from the left and right front speakers.

We thank Dolby Laboratories Licensing Corporation for its unique directionality emphasis circuitry.

Before enjoying Dolby Pro Logic Surround effect, you need to connect video equipment (VCR, TV, etc.) to your stereo system.

### What is Pro Logic

Pro Logic is a form of playback system. It uses professional decoder technology for movie creators to recreate the sound field of a two-channel Dolby Surround signal.

## Dolby Pro Logic Surround Modes

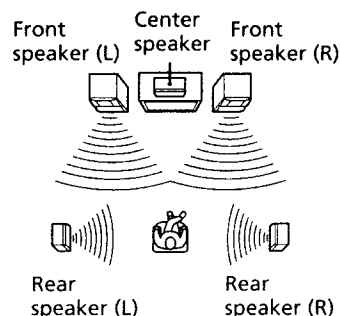
You can select one of the following three modes, depending on the arrangement of your speaker system.

After deciding the Pro Logic mode, select the same one in "Adjusting the Sound Level."

### NORMAL mode

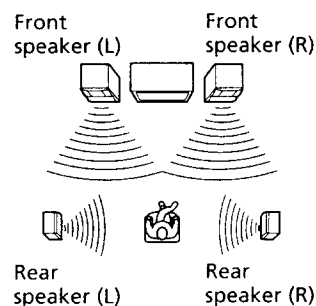
Select this mode when using rear speakers and a small center speaker such as those provided with this system.

Since a small speaker cannot reproduce a full bass sound, the low bass sound on the center channel is output through the left and right front speakers.



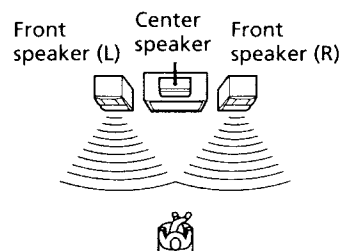
### PHANTOM mode

Select this mode when you are not using a center speaker. The sound for the center channel is output from the left and right front speakers.



### 3CH (channel) LOGIC mode

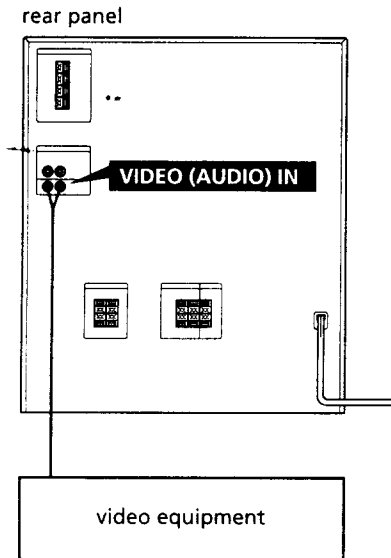
Select this mode when using only front and center speakers. The sound for the rear channel is output through the left and right front speakers. You may want to use this mode when listening to non-Dolby Surround sources (such as a synthesized TV "stereo" or music recordings with vocal solos) even if you have rear speakers.



## Connecting Optional Video Equipment

### Connecting only one video equipment

Use an audio/video connecting cable and make sure to connect the plugs to jacks of the same color.

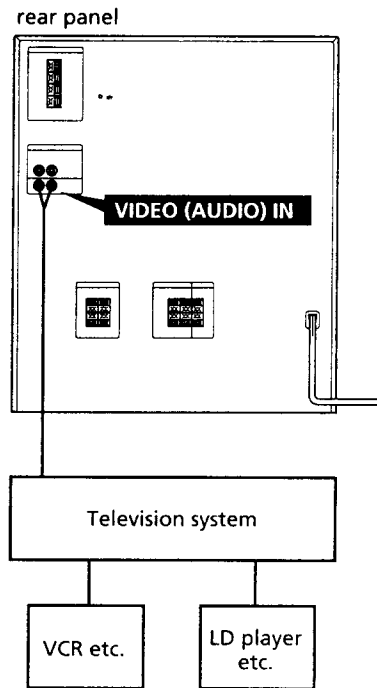


Connect	With
AUDIO OUT jacks of the video equipment	VIDEO (AUDIO) IN jacks

Press FUNCTION repeatedly until "VIDEO" appears in the display. The video equipment sound comes through the speakers. You can also record the video equipment sound.

## Connecting more than two video equipment at the same time

Use an audio/video connecting cable and make sure to connect the plugs to jacks of the same color.



Connect the video equipment to the TV. For more details concerning the connections, refer to the operation manuals of the video equipment and TV.

Connect	With
television system	VIDEO (AUDIO) IN jacks

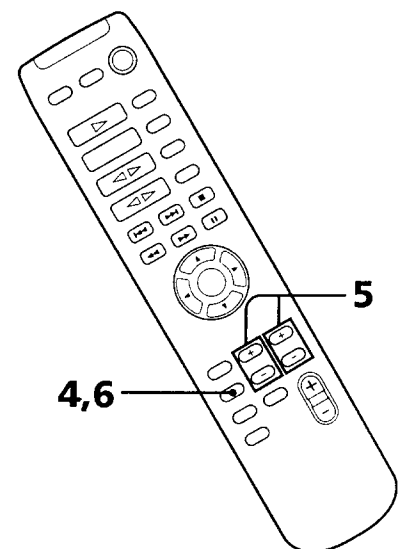
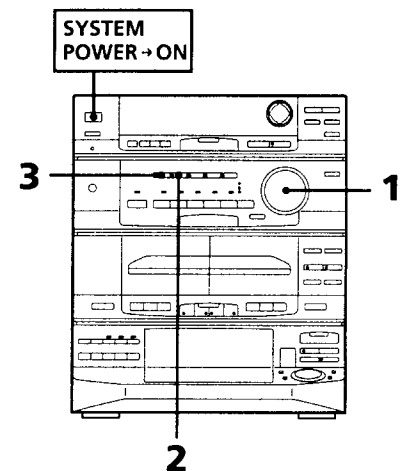
Select the input source of the desired VCR on the TV. Then press FUNCTION repeatedly until "VIDEO" appears in the display. The video equipment sound comes through the speakers. You can also record the video equipment sound.

## Enjoying Dolby Pro Logic Surround Effects

To make the Dolby Pro Logic Surround effects work, you need to use video tapes or laser discs etc. that carry "DOLBY SURROUND" or "DOLBY SURROUND PRO LOGIC" logo.

### Adjusting the Sound Level

To enjoy Dolby Pro Logic Surround effects, adjust the volume levels of the front, center and rear speakers by using the test tone.





**1** Turn VOLUME so that the volume for the front speakers is set to your normal listening volume.

**2** Press DOLBY PRO LOGIC ON/OFF. The ON/OFF lamp lights up.

**3** Press DOLBY PRO LOGIC CENTER repeatedly until the mode you want appears in the display. Each time you press the button, the display changes as follows:

NORMAL → PHANTOM → 3CH LOGIC

**4** Press T. TONE ON/OFF on the remote. The test tone is automatically generated by each speaker in one of the sequences shown below. (The channel corresponding to the speaker currently generating the tone flashes in the display.)

•When in NORMAL mode:

Front left → Center → Front right → Rear

•When in PHANTOM mode:

Front → Rear

•When in 3CH LOGIC mode:

Front left → Center → Front right

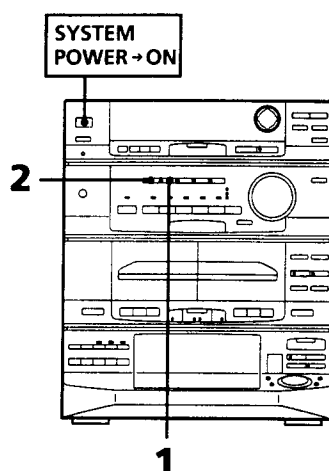
**5** While sitting in your normal listening position, adjust the volume using CENTER LEVEL +/- and REAR LEVEL +/- on the remote so that the volume that you hear from each speaker is at the same level. (When you turn VOLUME on the amplifier, the volume changes for all speakers.)

**6** After you have finished making all adjustments, press T. TONE ON/OFF to shut off the test tone.

**Notes**

- The test tone is produced only when the DOLBY PRO LOGIC mode is selected.
- If you change your listening and viewing position, you should perform the test adjustment again.

## Enjoying Dolby Pro Logic Surround Effect



**1** Press DOLBY PRO LOGIC ON/OFF (or PRO LOGIC ON/OFF on the remote). The ON/OFF lamp lights up.

**2** Press DOLBY PRO LOGIC CENTER repeatedly until the mode you want appears in the display. Each time you press the button, the display changes as follows:

NORMAL → PHANTOM → 3CH LOGIC

When you use the supplied speakers, select NORMAL mode.

For details of each mode, see "Dolby Pro Logic Surround Modes."

**Note**

The audio emphasis is will be canceled automatically when you turn on the Dolby Pro Logic Surround.

# Chapter 7: Additional Features

## Falling Asleep to Music

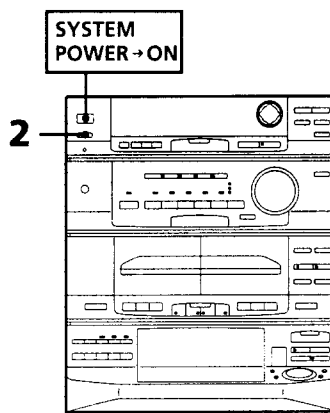
## Waking Up to Music

## Timer-Recording Radio Programs

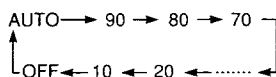
## Connecting Optional Equipment

## Falling Asleep to Music

You can set the stereo system to turn off automatically so you can go to sleep to music (sleep timer). Before setting the sleep timer, make sure the clock has been set correctly. You can set the sleep timer even if you have set the daily or recording timer.



- 1** Play your favorite sound source (a tape, the tuner, or a CD).
- 2** Press SLEEP repeatedly to choose how long you want the music to play. "SLEEP" and minutes indication appear in the display. The power will turn off after 10 to 90 minutes depending on the length of time you choose.



### When you choose AUTO

The power turns off when the current CD or tape finishes playback (for up to 100 minutes).

The power turns off even when you stop playing a CD, a tape or pause a tape while playing.

### To cancel the sleep timer

Press SLEEP repeatedly until "OFF" appears in the display.

### To check the remaining time before the sleep timer turns off the system

Press SLEEP once. The remaining time (in minutes) is displayed for several seconds.

### To change the remaining time while the sleep timer is on

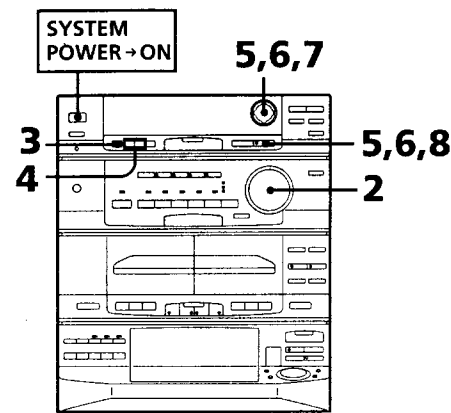
Press SLEEP repeatedly to select the remaining time you desire.

### Note

While the sleep timer is activated, the daily and recording timer do not work.

## Waking Up to Music

You can wake up to music at a preset time. You only need to set the timer once. When you select the CD player as the sound source, you can play a CD in any mode (normal, shuffle, or program). Before setting the timer, make sure the clock has been set correctly. You can set the daily timer even if you have set the sleep or recording timer.



- 1** Prepare the sound source.

### To wake up to the radio

Tune in the preset station you want.

### To wake up to a CD

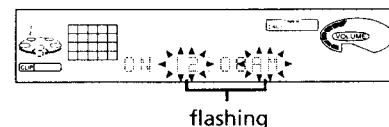
Load a CD and close the front cover. Make sure the disc number in the playing position in the display is the one you want to play.

If you want to play from a specific track, follow the procedures for programmed CD play. See "Playing Tracks in Desired Order (program play)."

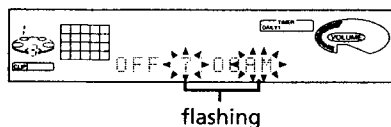
### To wake up to a tape

Insert the tape with the side you want to play facing forward. If you insert tapes in both decks, you will hear the sound from deck B.

- 2** Turn VOLUME to adjust the volume. The music will start playing with the adjusted volume at the preset time.
- 3** Press TIMER SET. "SELECT" and "TIMER" appear alternately in the display.
- 4** Press DAILY 1 or DAILY 2. "ON" appears and the hour digits and "AM" flash in the display.



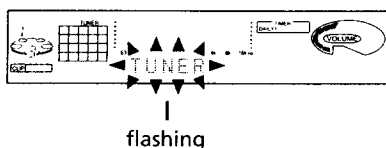
- 5 Press ◀ or ▶ (CURSOR CONTROL) to set the hour you want the system to turn on, then press ENTER/NEXT. Set the minutes in the same way. "OFF" appears and the hour digits flash in the display.



- 6 Press ◀ or ▶ (CURSOR CONTROL) to set the hour you want the system to turn off, then press ENTER/NEXT. Set the minutes in the same way.

- 7 Press ◀ or ▶ (CURSOR CONTROL) to select a sound source. The display changes as follows:

TUNER ↔ CD ↔ TAPE



- 8 Press ENTER/NEXT. The preset items appear in order in the display.
- 9 Press SYSTEM POWER to turn off the system. The power will turn on at the preset time and the music will play at the volume level you have adjusted. At the turn-off time, the power will go off again.

#### To change the preset timer settings

Start over from step 1.

#### To check the preset timer settings

- 1 Press DAILY 1 or DAILY 2 whichever you have set. "TIMER OFF" appears in the display.
- 2 Press DAILY 1 or DAILY 2 again. The preset items appear in order in the display, then "DAILY 1 ON" or "DAILY 2 ON" appears in the display.

#### To change the timer

Press the desired timer button.

#### To cancel the timer

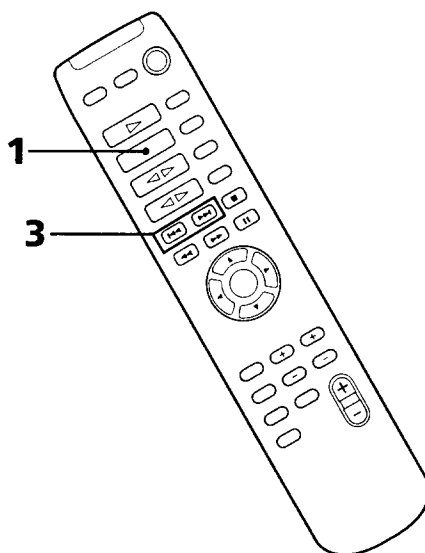
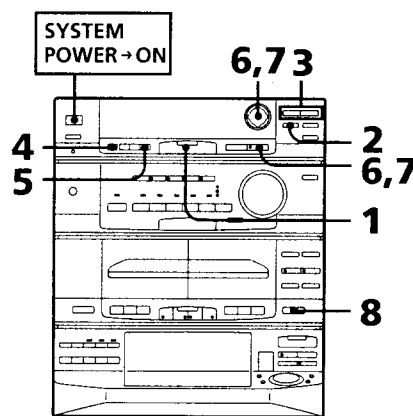
Press DAILY 1 or DAILY 2 whichever you have set. "TIMER OFF" appears in the display.

#### Notes

- You cannot set DAILY 1 and DAILY 2 to the same time.
- You cannot set the timer if the timer on and off times are the same.
- When you set the sleep timer, the daily timer does not turn on until the system turns off by the sleep timer.
- You cannot activate daily timer and recording timer at the same time.

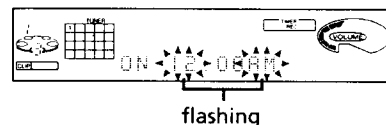
## Timer-Recording Radio Programs

You can set the timer to record the radio programs. This timer works only once for each setting. The volume level is automatically set to the minimum. Make sure the clock has been set correctly and preset the station beforehand. See "Presetting Radio Stations."



- 1 Press TUNER/BAND repeatedly until the band you want appears in the display.

- 2 Press TUNING MODE repeatedly until "PRESET" appears in the display.
- 3 Press TUNING +/- (or ◀▶/▶▶ on the remote) to tune in a preset station.
- 4 Press TIMER SET. "SELECT" and "TIMER" appear alternately in the display.
- 5 Press REC on the tuner. "ON" appears and the hour digits and "AM" flash in the display.



- 6 Set the hour you want to start recording by pressing ◀ or ▶ (CURSOR CONTROL), then press ENTER/NEXT. Set the minutes in the same way. "OFF" appears and the hour digits flash again.
- 7 Set the hour you want to stop recording by pressing ◀ or ▶ (CURSOR CONTROL), then press ENTER/NEXT. Set the minutes in the same way. The preset items appear in order in the display.
- 8 Press EJECT and insert a tape in deck B with the side you want to record facing forward. Recording always starts from the front side. If necessary, select the direction mode. You can use TYPE I (normal) or TYPE II (CrO<sub>2</sub>) tapes.
- 9 Press SYSTEM POWER to turn off the system. The power will turn on at the preset time and the recording will start with the minimum volume level automatically. At the turn-off time, the power will go off again.

#### To cancel the timer settings

Press REC on the tuner so that "TIMER REC" disappears from the display. Press REC again to activate the timer.

#### To check the timer settings

Press REC twice in succession.

#### To change the timer settings

Repeat step 1 to 9.

#### Notes

- The band and station will be recalled as you set them, but the recording does not start if the system power is on.
- You cannot activate recording timer and daily timer at the same time.

## Connecting Optional Equipment

For greater enjoyment of your stereo system, you can connect other components to the stereo. You can connect :

- a VCR to the VIDEO (AUDIO) IN jacks
- a turntable to the PHONO IN jacks
- headphones to the PHONES jack on the front panel
- an LD player to the VIDEO (AUDIO) IN jacks

### To connect a VCR


- 1 Connect the VCR or other video equipment to the VIDEO (AUDIO) IN jacks.
- 2 Press FUNCTION repeatedly until "VIDEO" appears in the display.  
The connected sound source comes through the speakers.  
You can also record the VCR sound.

### To connect a turntable

- 1 Connect the turntable to the PHONO IN jacks on the rear panel.
- 2 Press FUNCTION until "PHONO" appears in the display.  
The turntable sound comes through the speakers.  
You can also record the turntable sound.

### Note

When you use the turntable, adjusting the volume high may cause distortion or howling. This is often caused by the bass sound from the speakers which vibrate the floor and air. That vibration could be picked up by the needle of the turntable, and produce the distortion or howling. To avoid distortion or howling, do the following :

- 1 Keep some distance between the speakers and the turntable.
- 2 Stop using the surround effect.
- 3 Install the speakers or the turntable on a firm and solid place.
- 4 Set DBFB to "DBFB  " or off.

### To connect an LD player

- 1 Connect the LD player to the VIDEO (AUDIO) IN jacks.
- 2 Press FUNCTION repeatedly until "LD" appears in the display.  
The connected sound source comes through the speakers.  
You can also record the LD player sound.

### Note

If "LD" does not appear in the display even if you have pressed FUNCTION, press SYSTEM POWER while pressing down FUNCTION when the power is off. "VIDEO" will be switched to "LD." To return to "VIDEO", follow the same procedures for changing to "LD."

# For Your Information

## Precautions

## Troubleshooting Guide

## Maintenance

## Specifications

## Index to Parts and Controls

## Index

## Precautions

If you have any questions or problems concerning your stereo system, please consult your nearest Sony dealer.

### Caution

The use of optical instruments with this product will increase eye hazard.

### On operating voltage

Before operating the stereo system, check that the operating voltage of your stereo system is identical with the voltage of your local power supply.

<b>Operating voltage</b>	120 V AC, 60 Hz
--------------------------	-----------------

### On safety

- The stereo system is not disconnected from the AC power source as long as it is connected to the wall outlet, even if the system itself has been turned off.
- Unplug the system from the wall outlet if it is not to be used for an extended period of time. To disconnect the cord, pull it out by the plug. Do not pull the cord itself.
- Should any solid object or liquid fall into a component, unplug the stereo system and have the component checked by qualified personnel before operating it any further.
- Should the AC power cord need to be changed, have it done at a qualified service shop only.
- As the laser beam used in this unit is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

### On installation

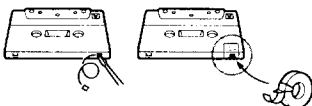
Place the stereo system in a location with adequate ventilation to prevent heat buildup in the stereo system.

### On condensation in the CD player component

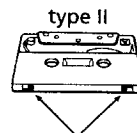
If the system is brought directly from a cold location to a warm one, or is placed in a very damp room, moisture may condense on the lens inside the CD player. Should this occur, the CD player will not operate. Remove any CDs and leave the system turned on for about an hour until the moisture evaporates.

### To save a tape permanently

To prevent a tape from being accidentally recorded over, break off the cassette safety tab from side A or B as illustrated. If you later want to reuse the tape for recording, cover the broken tab with adhesive tape.



When you are using a type II (CrO<sub>2</sub>) cassette, be careful not to cover the detector slots which allow the tape player to automatically detect the type of tape.



Detector slots

### In case color irregularity is observed on nearby a TV screen.

With the magnetically shielded type of speaker system, the speakers can be installed near a TV set. However, color irregularity may still be observed on the TV screen depending on the type of your TV set.

### If color irregularity is observed...

Turn off the TV set once, then turn it on after 15 to 30 minutes.

### If color irregularity is observed again...

Place the speakers farther away from the TV set.

## Troubleshooting Guide

If you run into any problem using this stereo system, use the following check list. First check the following points:

- The AC power cord is connected firmly.
- The speakers are connected correctly and firmly.

Should any problem persist after you have made the checks below, consult your nearest Sony dealer.

### Tuner

#### "TUNED" flashes in the display.

→ Adjust the antenna.

#### "STEREO" flashes in the display.

→ Adjust the antenna.

#### There is severe hum or noise.

- Adjust the antenna.
- The signal strength is too weak.  
Connect the external antenna.
- Connect the ground wire.

#### A stereo FM program cannot be received in stereo.

→ Press STEREO/MONO so that "STEREO" appears.

## Tape Player

### The tape does not record.

- No tape is inserted in the cassette compartment.
- The safety tab has been removed from the cassette.
- The tape has reeled to the end.

### The tape does not record nor play back, or there is a decrease in sound level.

- The heads are dirty. Clean them.
- Magnetic deposits have built up on the record/playback heads.\*

### There is excessive wow or flutter, or the sound drops out.

- The capstans or pinch rollers are contaminated.\*

### The tape does not erase completely.

- Magnetic deposits have built up on the record/playback heads.\*

### Noise increases, or the high frequencies are erased.

- Magnetic deposits have built up on the record/playback heads.\*

### The sound recorded from optional equipment is distorted.

- Change the function setting so that "LD" appears when pressing FUNCTION. To change "VIDEO" to "LD", press and hold down SYSTEM POWER and FUNCTION with the system power turned off.

\* See "Maintenance".

### Sound comes from one channel, or is unbalanced between the left and right speakers.

- Check the speaker connections of the inoperative channel.

### The left and right sounds are reversed.

- Check the speaker connections and speaker placement.

### There is no bass or the location of the musical instruments is apparently imprecise.

- Check the speaker connections for proper phasing.

### There is severe hum or noise.

- The TV, VCR, or/and speakers are too close to the stereo system. Move the stereo system away from them.

### "12:00 AM" flashes in the display.

- A power interruption occurred. Set the clock again.

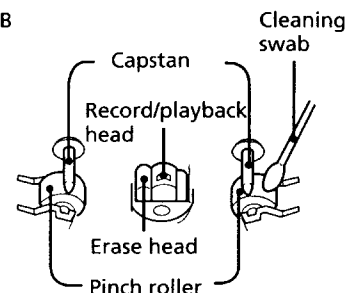
### Demo mode appears in the display after deactivating the demo mode.

- When a power interruption occurred for longer than half a day, set the music clips, the timer settings and the tuner presets again.

### The remote does not function.

- The batteries have run down. Replace both batteries.
- There is an obstacle between the remote and the system. Remove the obstacle.

Deck B



Insert a tape after the areas cleaned are completely dry.

### To demagnetize the tape heads

After 20 to 30 hours of use, enough residual magnetism will have built up on the heads to begin to cause loss of high frequencies and hiss. At this time, demagnetize the heads and all metal parts in the tape path with a commercially available tape head demagnetizer. Refer to the instructions of the demagnetizer.

### To clean the cabinet

Use a soft cloth slightly moistened with a mild detergent solution.

### To clean the CD

When a CD is dirty, clean it with a cleaning cloth. Wipe the CD from the center out.

### Notes on CDs

- Do not use solvents such as benzene, thinner, commercially available cleaners, or antistatic spray intended for vinyl LPs.
- If there is a scratch, dirt, or fingerprints on the CD, it may cause a tracking error.

## CD Player

### The CD will not play.

- The CD is dirty.
- The CD is loaded label side down.
- Moisture condensation has built up. Leave the system turned on for about an hour until the moisture evaporates.

### Play does not start from the first track.

- The player is in program or shuffle mode. Press CONTINUE.

## General

### There is no sound.

- Turn VOLUME clockwise.
- The headphones are connected. Disconnect them.

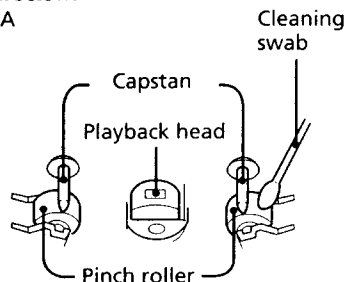
## Maintenance

### To clean the tape heads and tape path

Contaminated tape heads cause poor recording or sound drop out in playback. We recommend cleaning after every 10 hours of operation.

Open the cassette compartment and wipe the heads, pinch rollers, and capstans with a cleaning swab slightly moistened with cleaning fluid or alcohol. Wipe the parts shown below:

Deck A



## Specifications

### AUDIO POWER SPECIFICATIONS

#### POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6 ohm loads, both channels driven, from 70 - 20,000 Hz; rated 50 watts per channel minimum RMS power, with no more than 0.9 % total harmonic distortion from 250 milliwatts to rated output (FRONT SPEAKER.)

### CD player section

System

Compact disc digital audio system

Laser	Semiconductor laser ( $\lambda = 780 \text{ nm}$ ) Emission duration: continuous
Laser output	Max. 44.6 $\mu\text{W}$ *
* This output is the value measured at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.	
Frequency response	2 Hz – 20 kHz ( $\pm 0.5 \text{ dB}$ )
Wavelength	780 – 790 nm

## Tuner section

FM stereo, FM/AM superheterodyne tuner

### FM tuner section

Tuning range	87.5 – 108.0 MHz (100 kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

### AM tuner section

Tuning range	530 – 1,710 kHz (with the tuning interval set at 10 kHz) 531 – 1,710 kHz (with the tuning interval set at 9 kHz)
Antenna	AM loop antenna, External antenna terminals
Intermediate frequency	450 kHz

## Tape player section

Recording system	4-track 2-channel stereo
Frequency response	(DOLBY NR OFF) 40 – 13,000 Hz ( $\pm 3 \text{ dB}$ ), using SONY TYPE I cassette 40 – 14,000 Hz ( $\pm 3 \text{ dB}$ ), using SONY TYPE II cassette
Wow and flutter	$\pm 0.15 \%$ W. peak (IEC) 0.1 % W.RMS (NAB) $\pm 0.2 \%$ W.peak (DIN)

## Amplifier section

Continuous RMS power output:	
FRONT SPEAKER:	60 W + 60 W (6 ohms at 1 kHz, 5% THD)
CENTER SPEAKER:	50 W (8 ohms at 1 kHz, 5% THD)
REAR SPEAKER:	25 W + 25 W (16 ohms at 1 kHz, 5% THD)

### Inputs

PHONO (phono jack):	Sensitivity 3 mV, impedance 47 kilohms
VIDEO (AUDIO) IN (phono jack):	Sensitivity 250 mV, impedance 47 kilohms

Outputs	
PHONES (phone jack):	accept headphones of 6 to 16 ohms
FRONT SPEAKER:	accept impedance of 6 to 16 ohms
SURROUND SPEAKER REAR:	accept impedance of 16 ohms
SURROUND SPEAKER CENTER:	accept impedance of 8 ohms

## Speaker section

### Front speaker SS-D2700AV

Speaker system	3-way speaker system
Speaker units	Woofer: 17 cm dia., cone type Tweeter: 6 cm dia., cone type Super tweeter: 2 cm dia., dome type
Nominal impedance	6 ohms
Dimensions	Approx. 260 $\times$ 480 $\times$ 270 mm (10 <sup>1</sup> / <sub>4</sub> $\times$ 19 $\times$ 10 <sup>3</sup> / <sub>4</sub> inches) (w/h/d)
Mass	Approx. 5.6 kg (12 lb 6 oz.) per speaker

### Center speaker SS-CN120

Speaker system	Full speaker system
Speaker units	Woofer: 10 cm dia., full type
Nominal impedance	6 ohms
Dimensions	Approx. 345 $\times$ 116 $\times$ 185 mm (13 <sup>5</sup> / <sub>8</sub> $\times$ 4 <sup>5</sup> / <sub>8</sub> $\times$ 7 <sup>5</sup> / <sub>8</sub> inches) (w/h/d) incl. front grille
Mass	Approx. 1.8 kg (4 lb)

### Rear speaker SS-SR120

Speaker system	Full speaker system
Speaker units	Woofer: 10 cm dia., full type
Nominal impedance	16 ohms
Dimensions	Approx. 175 $\times$ 127 $\times$ 185 mm (7 $\times$ 5 $\times$ 7 <sup>3</sup> / <sub>8</sub> inches) (w/h/d) incl. front grille
Mass	Approx. 1.3 kg (2 lb 13 oz.) per speaker

## Supplied accessories

AM loop antenna (1)
Remote RM-SE1AV (1)
Sony SUM-3 (NS) batteries (2)
FM wire antenna (1)
Speaker cords (3)
Center speaker feet (4)

## General

Power requirements	120 V AC, 60 Hz
Power consumption	U.S. model: 170W Canadian model: 190 W
Dimensions	Approx. 355 $\times$ 425 $\times$ 400 mm (14 $\times$ 16 <sup>3</sup> / <sub>4</sub> $\times$ 15 <sup>3</sup> / <sub>4</sub> inches) (w/h/d) incl. projecting parts and controls
Mass	Approx. 12.4 kg (27 lb 6 oz.)

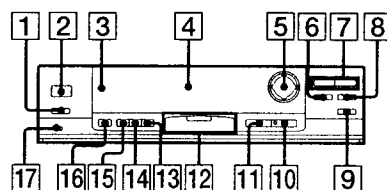
Design and specifications subject to change without notice.

# Index to Parts and Controls

Refer to the pages indicated in parentheses for details on how to use the controls.

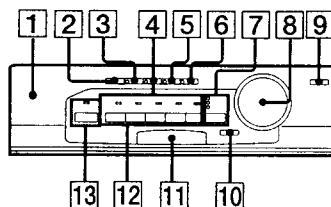
## Front Panel

### Tuner section



- 1 SLEEP button (26)
- 2 SYSTEM POWER switch (7)
- 3 Remote sensor
- 4 Display window (32)
- 5 CURSOR CONTROL buttons (6, 21, 27)
- 6 TUNING MODE button (12)
- 7 TUNING +/- buttons (12)
- 8 TUNER MEMORY button (13)
- 9 STEREO/MONO button (12)
- 10 ENTER/NEXT button (6, 9, 13, 21, 27)
- 11 DISPLAY/DEMO button (5, 8, 21)
- 12 TUNER/BAND button (12, 27)
- 13 REC button (27)
- 14 DAILY 2 button (26)
- 15 DAILY 1 button (26)
- 16 TIMER SET button (26)
- 17 CLOCK SET button (6)

## Amplifier section



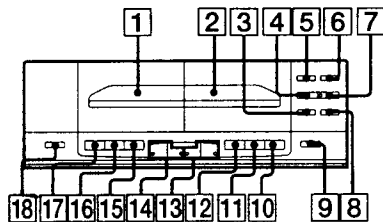
- 1 PHONES jack (20)
- 2 DOLBY PRO LOGIC CENTER button (25)
- 3 DOLBY PRO LOGIC ON/OFF button/indicator (25)
- 4 HALL button/indicator (21)
- 5 LIVE button/indicator (21)
- 6 THEATER button/indicator (21)
- 7 FILE SELECT button/indicators (20, 22)

**continue to next page →**

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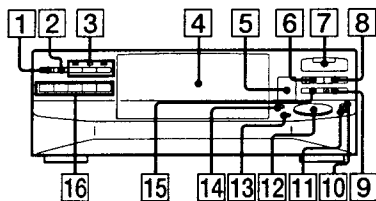
- 8 VOLUME control (20, 25, 26)
- 9 DBFB button (20)
- 10 MEMORY button (22)
- 11 FUNCTION button (7, 14, 28)
- 12 FILE 1-5 buttons/indicators (20, 22)
- 13 EFFECT button/indicator (21)

## Tape player section



- 1 Cassette compartment for deck A (14)
- 2 Cassette compartment for deck B (14)
- 3 DOLBY NR button (14)
- 4 (pause) button for deck B (14)
- 5 HIGH SPEED DUBBING button (19)
- 6 CD SYNCHRO button (15)
- 7 REC (recording) button (15)
- 8 DIRECTION button (15)
- 9 EJECT button for deck B (14)
- 10 (fast rightward) button for deck B (14)
- 11 (fast leftward) button for deck B (14)
- 12 (stop) button for deck B (14)
- 13 (play) button for deck B (14)
- 14 (play) button for deck A (14)
- 15 (fast rightward) button for deck A (14)
- 16 (fast leftward) button for deck A (14)
- 17 STOP button for deck A (14)
- 18 EJECT button for deck A (14)

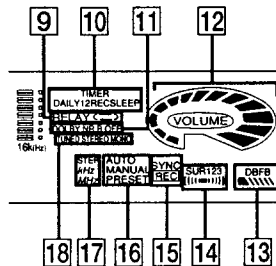
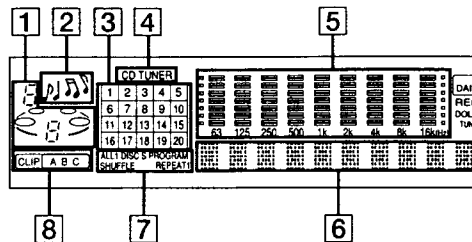
## CD player section



- 1 MUSIC CLIP PLAY button (11)
- 2 MUSIC CLIP ERASE button (11)
- 3 CLIP A, B, C buttons/indicators (10)
- 4 Front cover (7)
- 5 OPEN button (7)
- 6 (pause) button (7)
- 7 (play) button (7)
- 8 (stop) button (7)
- 9 AUTO button/indicator (7, 8)
- 10 PROGRAM button (9)
- 11 REPEAT button (9)
- 12 JOG dial (7)
- 13 SHUFFLE button (8)
- 14 CONTINUE button (7)

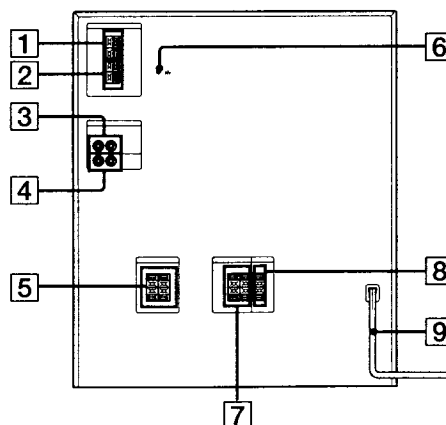
- 15 DISC SKIP button (7)
- 16 DISC 1 - 5 buttons (7)

## Display Window



- 1 Disc calendar (7)
- 2 Demo mode indications (5)
- 3 Music calendar (7)
- 4 CD/TUNER indication (7, 12)
- 5 Graphic Equalizer indication (21)
- 6 Multi-display (7, 12)
- 7 CD play mode indications (7)
- 8 CLIP indicator (10)
- 9 Tape direction mode indication (14)
- 10 TIMER indication (26)
- 11 DOLBY NR B indication (14)
- 12 VOLUME indication (20, 26)
- 13 DBFB indication (20)
- 14 SUR indication (20)
- 15 SYNC REC indicator (15)
- 16 Tuning mode indications (12)
- 17 STEP/frequency waves indication (12)
- 18 TUNED/STEREO/MONO indications (12)

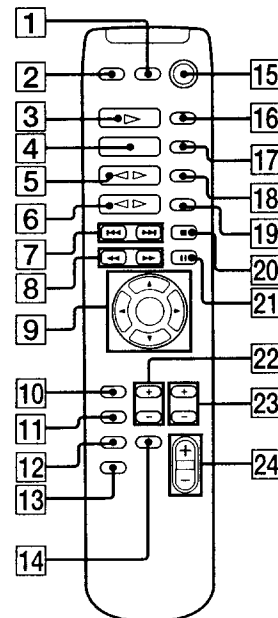
## Rear panel



- 1 AM terminal (4)

- 2 FM 75Ω terminal (5)
- 3 PHONO IN jacks (28)
- 4 VIDEO (AUDIO) IN jacks (24, 28)
- 5 FRONT SPEAKER connectors (4)
- 6 ground terminal (5)
- 7 SURROUND SPEAKER REAR connectors (4)
- 8 SURROUND SPEAKER CENTER connectors (4)
- 9 AC power cord (5)

## Remote



- 1 FUNCTION button (7, 14)
- 2 SLEEP button (26)
- 3 CD (play) button (7)
- 4 TUNER/BAND button (12)
- 5 DECK A button (14)
- 6 DECK B button (14)
- 7 AMS (TUNING +/-) buttons (7, 12)
- 8 buttons (8)
- 9 MUSIC MENU buttons (20)
- 10 PRO LOGIC ON/OFF button (25)
- 11 T. TONE ON/OFF button (25)
- 12 DSP MODE button (21)
- 13 LOOP button (10)
- 14 DSP LEVEL button (22)
- 15 POWER button (7)
- 16 EDIT button (16)
- 17 CHECK button (9, 16)
- 18 CLEAR button (9)
- 19 D.SKIP button (7)
- 20 (stop) button (7)
- 21 (pause) button (7)
- 22 CENTER LEVEL +/- buttons (25)
- 23 REAR LEVEL +/- buttons (25)
- 24 VOLUME (volume) +/- buttons (20, 25)



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